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THE ADOLESCENT

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"This chapter on the education of boys during adolescence contains perhaps the most valuable criticism in a remarkably enlightened and interesting book."



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# THE ADOLESCENT

BY

J. W. SLAUGHTER.

WITH AN INTRODUCTION BY

J. J. FINDLAY.



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## PREFATORY NOTE.

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THE intention of this book is to provide for those who have dealings with adolescent boys and girls, in whatever capacity, a clear outline picture of the period. The effort has been made to avoid overloading any part with detail. But even though simplified to the last degree, the problems of adolescent development are multiple and difficult to solve. This, however, is not sufficient justification on the part of those who have the welfare of youth in hand for the continued failure to acquaint themselves with knowledge of the period. It has been felt necessary in places to combat established practices which are conceived to be, psychologically and pedagogically, erroneous. Predominant attention is given to the development of the emotions, corresponding to the significance of these factors in the period studied. The chief function of youth is the creation of ideals and the development in connection with these of characteristics especially typical of civilised man.

No discussion of this kind can do other than base itself on the monumental work of Dr. G. Stanley Hall. The only justification possible for any other general publication in the same field is that Dr. Hall's work is somewhat inaccessible to the reader who has little technical knowledge, but needs in daily practice a

*Prefatory Note.*

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knowledge of the main lines of development of boys and girls. It is hoped that this book will serve as an introduction to the larger work and lead to its careful and extended study. Dr. Hall must not, however, be held responsible for what is said in this book, especially as concerns the interpretation of the facts.

I wish to express my gratitude to Professor Findlay for writing the Introduction and for giving me help of many kinds.

J. W. SLAUGHTER.

LONDON, *December 5th*, 1910.



# INTRODUCTION,

BY

J. J. FINDLAY.

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THE author of this work appears to put slight store either by old age or middle age ; but he will willingly admit that the seniors are sometimes of use—since he has invited me to write an introduction !

And I do so with pleasure, with more than pleasure ; I esteem it a privilege to have my name associated with a book of such unusual quality. This is Dr. Slaughter's first publication in book form ; but if, as I anticipate, he is read with care, it will not be his last ; for the reader will soon discern that many years of research and of reflection lie behind these brief chapters.

My task, then, is simply to hand the volume to my friends and say, " Here is a good thing ; give it your attention." An introduction serves the purpose of a signed review : it enables the reviewer to enlarge upon the worth of a book, and also to indulge in a few reflections of his own. This is not the first time that I have been privileged to invite the attention of English teachers to work which lies far beyond my own powers. It has always seemed to me that we who study education in England are inclined to provincialism ; unwilling to consider new aspects of truth unless they are contributed by one of ourselves. Hence I have taken some pains

to serve the office of a broker—an honest broker, I hope—honestly endeavouring to distinguish wheat from chaff, and then exhorting my friends to share the feast. Dr. Slaughter, by the by, can certainly be regarded by this time as “one of ourselves,” if any importance is attached, in matters of science, to a man’s domicile; for although his training was chiefly gained in the United States (where so many efforts are witnessed to advance the study of education), he has done his work in London, and his understanding of English attitudes towards the school, and also of tendencies at work in other European countries, enhances the value of the chapters here presented.

I dwell on this point because it indicates one of the qualities which sets it apart from the elaborate exposition by Dr. Stanley Hall, which bears a similar title. Students may be inclined hastily to throw this book aside, supposing it to be merely a popular summary by a disciple of the teachings of his master. But this would be doing an injustice to both parties. Dr. Slaughter, although a pupil in the remarkable school which President Hall has founded, stands on his own feet; no one can read these pages without discovering that while they are based upon extensive and rigorous study in many fields,—Anthropology, History, Literature and Art, as well of Psychology and Education—they reveal, too, a student of mankind, an observer who sees himself and his fellows in the making, and tests the conclusions of his bookshelves by contemplation of human behaviour.

The author states that he writes specifically for those who have responsibilities as regards the oversight of

young people ; but I should like to indicate the attraction which these chapters may have for a wider circle—for men and women who are not directly concerned with educational responsibilities either in the home or the school, but are sensitive to larger movements of scientific inquiry. These will be prepared to admit the claim that psychology is making as an active influence in the formation of opinion ; not perhaps the psychology of the laboratory, certainly not the psychology of the logician, but the psychology which lays hold of human experience—in the market place, the home, the court of justice, the hospital—which takes for its province the entire record of mankind, and psychologizes it, *i.e.*, seeks to throw light on the moving scene, and interpret it in terms of mental process. Such readers will be ready to welcome what Dr. Slaughter has to offer, for his standpoint has already won their acceptance ; they, with him, are prepared to evaluate experience, not in terms of momentary and superficial performance, but in terms of growth, of biological process. To such students the method in psychology is no longer one of mere introspection, but of retrospection, and the review embraces not only subjective experience, but race experience as unfolded in anthropology and history.

The author wastes no words, but his first chapter puts the reader in the right attitude of mind, and the very conciseness with which the volume is written leaves ample margin for illustration and expansion, which a well-stored mind will supply from other fields of science and research.

Quite a different appeal is made to the educationist—a hateful term, by the by, but there seems to be no escape from it! Here the author offers trenchant criticism of current doctrine and method: the teaching of physical exercises, of art, of classics, methods of schooling for girls, all in turn are challenged. It is not my present concern to take sides in the conflict, but only to assure my colleagues in our teaching profession that the challenge is serious, and that it cannot be met by endeavouring to shift the field of combat. Here are conclusions, gathered from research in genetic psychology and kindred fields. If the interpretations are misleading, if the data on which these are based are incorrect, let the errors be exposed; but let no one suppose that the study of adolescence can be left out of account in judging of the worth of current systems of secondary education. The account, no doubt, will not be squared to-day or to-morrow; but truth, when discovered, seldom withdraws its light.

And, after all, Dr. Slaughter's doctrine is not so subversive as might at first sight appear. Undoubtedly he says some hard things of the Public Schools, and his fashion of hitting straight from the shoulder may cause resentment in certain quarters; but when one comes to essentials, and seeks to strip that system of education of what is mere convention and prejudice, I venture to assert that our author's view of adolescent development will strengthen whatever is sound in the pedagogy of the Public School. It is now many years since I edited some of the writings of Arnold of Rugby, partly designed, as I said, to "renew among Public School men.



the memory of a great leader," and I have naturally reverted to Arnold while reading the proofs of the volume before us. Allowing for the advances during seventy years in science and in social outlook, I am prepared to hold that the essential things for which Arnold stood reappear in *The Adolescent*, although in outward appearance they suffer much disguise. Arnold knew nothing of formal psychology, but he constantly insisted upon the need for recognising stages of growth: his description of the uncontrolled "barbarian" society of a boarding school recalls much that Dr. Slaughter has to say of the impulses of a hooligan gang. With our author, as with Arnold, "the chief business of adolescence is the formation and projection of ideals"—a business in which religion must play a leading part.

As for the curriculum to achieve this end, sharp as the division appears between the upholder and the opponent of the classics, they are at bottom one in their desire to provide an abundance of humanistic material. Arnold would have agreed that "at no time of life is the content so important and the form relatively so negligible." Only in one direction does the divergence between the modern psychologist and the great reformer appear fundamental. Arnold was always desirous of "hastening" his pupils through the early years of adolescence, anxious to raise them, with precocious seriousness, to a higher level of "moral thoughtfulness." Many devoted schoolmasters, both in our Public Schools and elsewhere, have been influenced by similar anxieties, but it may be doubted whether the type of manhood



produced is always of the finest : whether God and Nature are really at strife in the way this theory would presuppose. I can find no trace of such an opinion in this volume : stages of growth are to be lived through ; science will not be terrified by dread ; youth is simpler and saner than most men think it to be. I am inclined to think that this special theory of Arnold's was due to the unnatural conditions under which his young people were herded together in the boarding school, as they are to-day ; and the careful reader of his writings, especially of his letters signed " A Wykehamist," will find much to confirm this speculation.

It is worth observing that a similar note of alarm pervades the great work by President Hall to which we have referred ; as you read his pages you are inclined to tremble for the future of our race ; violent and disastrous ills are imminent : if youth is to be " saved " we greybeards must be aroused to the sense of their peril. I am convinced that the situation, as President Stanley Hall thus pictures it, may in some real sense be true of the United States at the present time : that country presents, to my mind, many of the phenomena of a race which riots in its youth, and therefore exhibits features which may be comparable to an excitable and irregular boyhood. Much of the psychological material from which Dr. Hall based his diagnosis was, no doubt, obtained from subjects who experienced psychical crises to a conspicuous degree, and the resulting impression on the reader's mind almost carries one back, although in a different mood, to the anxious attitude of Arnold of Rugby.

It is gratifying to find a cooler diagnosis in Dr. Slaughter's work. Certainly the years from fourteen to twenty-four constitute a great time; if tempests are to rock the soul at all, here is the season for them. But such storms are designed to brace the voyager; instead of hastening to the nearest harbour, youth had better be left to ride the storm: time and the wide seas with great spaces and open skies will, in due course, conduct the youth to his maturity. In this respect then I regard these chapters as helpful to a more dispassionate treatment of the theme, which certainly demands, while often failing to secure, an attitude of detachment.

And I would even go further than the author—perhaps, as I hinted in my first sentence, because I am somewhat more removed from the stage of adolescence than is he. I am not prepared to endorse his estimate of this period as “the most precious of the whole lifetime.” Doubtless, in the consciousness of many men, certainly of mine, the memory of those years is great—the intensity of adolescent experiences abides and leads many, perhaps, to look back to the years before twenty-five as a golden age which cannot be recovered. And, by contrast to the weaker sentiments which it is still the fashion to associate with the period of childhood, this exaltation of adolescence may be wholesome. But, looked at with thorough detachment, I see no reason for selecting any period of human life as especially important in contrast to the rest. Each stage is a stage, to be lived through with ample space; the young, rightly enough, hope never to grow old, and pity the sorrows that they picture

as the accompaniments of age. But why should age echo the inexperience of youth? True enough we cannot escape the figure of a trajectory to which our author introduces us in the first chapter: senile decay, (and its inevitable conclusion,) attacks the body, and therewith all those qualities or processes, call them what you please, that depend on that frail tenement. But when the later stages of experience come to be investigated with the same insight that our author has devoted to the adolescent, may we not at least hope that a psychology of middle life and of old age may be evolved, which may modify the course of that fatal curve and demonstrate once again the victory of mind over matter? Or are we still to limit our range to the periods of Shakespeare's melancholy Jaques? At present on such themes the man of science has little to say, but the poets are ready to soar beyond the bounds of science. A century ago, when men were only beginning to respect the stages of childhood, Wordsworth idealised the life of infancy, and now at a later day, Browning, in *Asolando* and in *Rabbi Ben Ezra*, has bidden us enrich our imagination with an ideal for the later stages: we older men, where science cannot help us, may indulge our dreams with the prophets and the poets. Our author holds that "the wisdom of older persons does not imply clearness of insight; but is, in last analysis, little more than a record of their own failures." Be it so, and the poet replies:—

For thence,—a paradox  
Which comforts while it mocks—  
Shall life succeed in that it seems to fail:  
What I aspired to be  
And was not, comforts me.

And so to our conclusion. These chapters impress us acutely with the need for research, with a deepened respect for the profound operations of growth which govern our destiny from the cradle to the grave; but they impress us all the more with a conviction of the boundless store of experience which awaits the human spirit in ages yet to be.

Grow old along with me!

The best is yet to be,

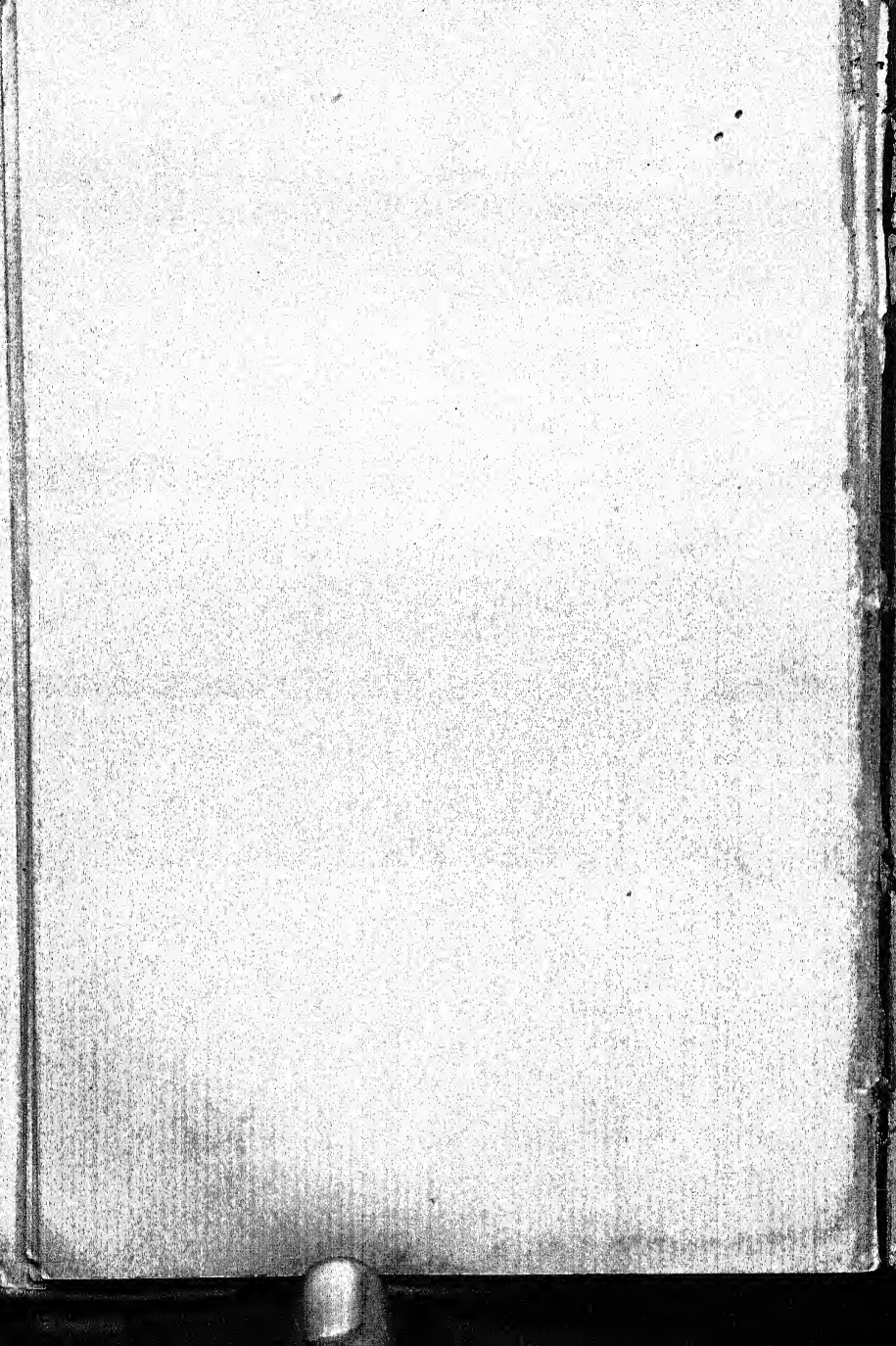
The last of life, for which the first was made:

Our times are in His hand

Who saith "A whole I planned,

"Youth shows but half; trust God: see all, nor  
be afraid!"







I.

GENERAL SURVEY OF THE PERIOD.

THE course of human life may be figured roughly as a trajectory, of which the rising portion corresponds to the period of growth, the relatively level portion to middle age and the fall to senile decay. Certain sections, as from the rise to the level and from the level to the fall, are chiefly characterised by change or transition, and to these the general term "crises" is considered applicable; each of them is, however, rather a series of crises than a specific turning-point. These periods manifest great individual differences, but are easily discernible. Everyone is vaguely aware that during adolescence the forces and tendencies previously operative break up and re-combine, and also that the transition to senility has pronounced characteristics in both women and men. The one important instrumentality which humanity has devised for dealing with the crises of life has been religion. The incidents of birth and death being classed as critical, the sacraments of the church, broadly interpreted, seem to be a group of devices for assisting the individual over the chasms found on his way.

This is particularly true of adolescence, the inception and close of which are met by the two sacraments of confirmation and marriage. But humanity has in all ages manifested a special regard and accorded a special treatment to this period of life. Initiation

ceremonies are found among nearly all savage peoples. The adolescent among the Australian aborigines is taken from the company of the women and initiated into the mysteries known only to the men, the instruction being carried on by the old men of the group. After circumcision, and armed with all the knowledge of the sacred bull-roarer, he is permitted to engage in all the activities of the adult male. Among most peoples initiation has the character of a more or less difficult test. The young man must bring home the scalp of an enemy among the American Indians, or a head among the head-hunters of Borneo, or, as in some parts of Africa, he must have to his credit the killing of a rhinoceros. In some regions he is severely beaten, and if he complains or shows signs of being in pain he is sent back to the company of the women; but if presenting an undisturbed appearance, supposed to be the peculiar accomplishment of the male, he is henceforth regarded as a man and is capable of possessing a wife and becoming the head of a family.

What is thus found to be the universal practice among savages has its counterpart among the most civilised. Reference has already been made to confirmation, but colleges and universities are also factors in the ceremonial of initiation. The process is the same in general outline. The young man is for a time secluded from the women, receives instruction from the "old men of the tribe," who are regarded as the depositories of all inherited wisdom, and at the end of the period, if successful in passing the modern test known as examinations, is initiated by the baccalaureate degree into the full functions of adult life. Commonsense is well aware that neither the years of instruction nor the

reception of the degree prepares for the serious business of life, but the ceremonial is so deeply rooted in tradition that it is generally accepted as adequate. The whole process is evidence of the special regard which mankind has accorded to the transition from youth to adulthood.

In other than ceremonial ways mankind has shown its love for youth and interest in its doings. Few of the departments of literature would have meaning without it. Human interest is imparted to a story chiefly through love and adventure. If one considers current novels it is easily seen that no essential difference exists between one and another. The old people participating are varied somewhat, but this alteration, like others, is only in the stage scenery; the movement of the drama is always the same—two adolescents discovering each other. The love affairs of the middle-aged lack interest, they are stale and always appear against the drab background of experience. Many people by means of circulating libraries and similar devices regale themselves constantly with this drama of youthful love. To be sure, the element of adventure is added, but this is also the province of youth—the unexpected has no right to happen to the middle-aged. To the young only is accorded the privilege of receiving fortunes from unknown uncles and of being marvellously successful after great difficulties in any of the undertakings of life.

But poetry and fiction are not alone in recording the high esteem given to youth. The beauty of the youthful figure is necessary to inspire the imagination of the sculptor. It is well known that the sculptor has a great antipathy to clothes and to the aged, and deals

with such material only on commission ; when in the act of free creation he returns inevitably to his old but always new and always inspiring theme. The painter as well never tires of delineating the youthful countenance and figure. While this art is presumably best adapted for depicting the meaning of the inner life and, therefore, cannot despise the faces of the old which reveal all the scars of life's battle, it remains true that such studies or portraits of specific individuals whom the world considers valuable do not generally enter into the act of free creation on the part of the artist. Painting centres upon youthful beauty. Even those painters who found their subjects in Christian history, and were supposed to be peculiarly averse from anything humanly beautiful, and even to despise the suggestion of fleshly desire, could not refrain from introducing the youthful Mary, the youthful Magdalene, St. John and St. Sebastian. It is doubtful, indeed, if modern painting would have been born at all had not the Renaissance brought a new interest in this world and a new respect for the flesh.

While materials for the study of adolescence exist in all the departments to which allusion has been made, there are very few studies of a thorough-going character. The chief concern in literature is to relate rather the incidents of adolescent development than its characteristics ; notwithstanding this, there is much to be found of great value. The charm of the Platonic Dialogues depends chiefly on the fact that they are concerned with an assemblage of young men ; the one older man, Socrates, in spite of his analytical quality of mind is still able to enter into the thoughts of the young, and considers it his highest purpose in



life to instruct youth. The young men of Plato include some of the best characters in the whole of literature ; with all their short-comings and exaggerations one is unable to withhold his admiration from them. As each of the young men illustrates some aspect of youth, the Dialogues as a whole may be taken as the first treatise on Adolescence. Other studies are to be found in poetry. An investigation of Shakespeare's characters has shown that his interest centred in this period of life and that his adolescents are by far the most interesting of his characters. Hamlet has been regarded as a chapter in psychology from many points of view, but it is chiefly so from the fact that it deals with an adolescent facing life with its problems, difficulties—even tragedies.

The best pictures of adolescent girls are to be found in the novels of George Eliot. Some of them are a little over-drawn, but this is perhaps necessary for literary purposes, and the attempt to describe the phases of this period of life may be taken as fairly successful.

It might be expected that biography would furnish plentiful material, but most of it is poor and disappointing. The best cases are those written by adolescents and descriptive of their own experiences. The diary of Marie Bashkirtscheff, in spite of its many falsetto effects, throws a flood of light on the development of girls. The intense passion and volcanic upheavals of Marie Bashkirtscheff find their counterpart in those described by Goethe in the "Sorrows of Werther." But this greatest of adolescents furnishes a better and more detailed delineation of the phases of development in the "Meister," which, like the "Sorrows of Werther,"



is a literary work whose chief interest is due to the fact that it is largely an autobiography.

The paucity of biographical material is due to a number of reasons, some of which should be mentioned, because they bear upon other questions as well as this. The chief one is the rapidity with which adolescence is forgotten. After arrival at maturity, many are ready to declare that there was nothing noticeable in their own development. Dr. Hall relates the case of a woman who, after listening to one of his lectures, declared that she at any rate had had no such experience as he described. It happened that her mother had kept a girlish diary, which was produced and found to contain a set of New Year resolutions, clearly indicating some of the most typical adolescent phases. This forgetfulness is manifested in the attitude of most parents to their adolescent sons and daughters, whom they persist in treating as children, the revolt from authority and struggle toward individuality being met with resentment instead of sympathy and help. Another reason, which is contributory to the foregoing, is that many adolescent experiences are unpleasant and seem to each person quite unique and of an intensely personal character. The majority of individuals being quite optimistic as to their own characters, do not like to relate, or even to remember, the weakness, inexperience and frequent humiliation on the road behind them.

It is to be hoped that biography makers will in the future free themselves from the obsession which has led them to cast most of the important personalities of the nineteenth century into the bog of "life and letters," and recognise the fact that biography is scientific as

well as literary. Not only are there well-marked stages and crises in the course of life, a description of which would give the best delineation of a personality, but there are two groups of facts now subject to scientific treatment which are indispensable in any description of the making of a man. These pertain to what he receives through the two orders of transmission—the organic and the social. Every modern investigation of the subject brings into clearer perspective and re-emphasises the significance of the hereditary equipment which an individual brings with him into the world. Only recently has the importance of family history become clear, and what is required of the biographer of any particular person is a description not merely of names, places and incidents in the lives of ancestors, but primarily and chiefly what factors are contained in the stock itself. As to social inheritance, it is commonly supposed that a sufficient account is given by relating how an individual passes from one to another educational device. This, doubtless, counts for something, but it is insignificant in the making of a man as compared with the kind of life led and especially those activities of childhood which may be described as occupational. And the reception of the social heritage is chiefly a matter of adolescence, when adaptation is made to the whole group of non-material resources of the race, intellectual, moral, artistic and religious. Mere life in a university is unimportant; it affects one as it does a thousand other machine-made duplicates, but if the university is possessed at the moment of some distinctive and inspiring influence, the whole situation is altered. It is obviously desirable to know in detail what influences play upon the adolescent

and also, in detail, his modes of reaction. When these conditions are satisfied, biography will be worthy of its name and will provide for future adolescents precisely those text-books of life which they so much require.

In view of the consideration universally given to adolescence, the high place it holds in art and literature, and the devices—religious, educational and other—elaborated to meet its requirements, it is well to inquire whether youth has proved itself deserving of all this praise and interest. Studies have been made of great men in order to ascertain at what point the record of unusual achievement begins. In the great majority of cases, and almost universally in the field of art, future greatness is clearly foreshadowed before the twenties; an exceptional case is that of music, where evidence of unusual ability generally appears by the age of nine. In other departments ordinary observation gives better evidence than statistics. Every adolescent is a reformer, and the world probably advances through the utilisation of the ideals and energies of successive generations of youth. Older persons perhaps desire reforms, but are too well aware how little they can accomplish and are correspondingly deficient in courage, but the adolescent possesses in a high degree the ability to "rush in where angels fear to tread." It is in practical affairs that the world has hitherto refused to trust youth, but history shows us that extraordinary achievement nearly always depends upon youthful initiative. The humdrum business of life is better in the hands of the middle-aged, who have become slaves of their habits; but if advance is desired in any department, from statesmanship to manufacture, control of affairs should be placed in the hands of the young.

It is possible that the inclined plane of life is in the wrong direction, and that youth should begin at the top and descend in proportion to the decay of powers; their vision of what is ultimately required is less obscured by the exigencies of the day's work. After all, the boasted wisdom of older persons does not imply clearness of insight, but is, in last analysis, little more than a record of their own failures.

No satisfactory explanation has yet been given of the facts of growth and maturation; this is the perpetual problem of the biological sciences. Much, however, has been done by way of description of human growth, and interpretation has necessarily consisted in a comparison of these facts with those pertaining to growth of individuals of the lower orders and to the evolution of the race as a whole. While it is not clear that the human period of growth can be described as climbing the genealogical tree, the method is sound and useful as giving perspective to the facts.

The period of childhood which precedes pubescence, and lasts for about three years, is one in which growth, both physical and mental, is slower than at any time until near complete maturity. The child has reached a point of stability and of almost complete adaptation to its environment; it is well in control of all functions and possesses great powers of endurance. The period has been called that of "drill," which implies that the methods of the schoolmaster do less harm than previously or subsequently. Emotional and imaginative life has a minor place and most of the interests are of the mechanical order; there is even a foreshadowing of reason which sometimes takes the form of a sceptical tendency. It seems as if all the forces of growth



having brought the child so far on its course come to a standstill, having delivered to the individual all that the primary hereditary impulses are able to contribute. This harmonious adjustment, so speedily and completely to be dissolved, has suggested to Dr. Hall that it is the individual counterpart of a time in the early history of the race when maturity was attained in these early years ; he believes that the reproductive function is movable up and down the age scale without greatly disturbing the factors that are in the first instance directly correlated with and dependent upon it. In this sense, the present period of adolescence may be regarded as a new storey erected by the race upon those already existing. Whether or not it is necessary to assume this hypothetical pygmoid ancestry of early maturity, the method of interpretation opens up a most suggestive group of facts relating to primitive adolescence. It is well known that maturity with existing savages comes earlier than with civilised peoples, and, what is more important, it is of very short duration. It seems certain that the speed of passing from childhood to adulthood is correlated with advance in civilisation. Savages are universally described as children, and it is a well-known fact that savage children placed in civilised schools are quite up to the average of ability, and in many cases beyond it, until the beginning of adolescence. The appearance of the reproductive instinct seems to arrest mental development at this point without, however, hindering full bodily growth.

That no necessary correlation exists between physical and mental development as regards proportion at any rate is shown in most cases of imbecility. Again, it

It is known that civilised persons placed under conditions which induce a reproductive prematurity suffer arrest, as is frequently seen with the *gamins* of large cities. The conclusion from these facts is quite clear, that civilisation and a prolongation of adolescence are found together. It is probable that the race came under conditions which favoured a late nubility, and by evolving a system of restraints placed a premium on hereditary accession to those factors which make for inhibition and irradiation in the development of character. It will be found that most of the characteristics of adolescence are those discernible in civilised as contrasted with savage peoples.

## II.

### GROWTH AND OTHER PHYSIOLOGICAL CHANGES.

THE facts of physical development assume a place of importance among the special phases of adolescence partly because of their obviousness, partly because of their significance. The increase in height and weight of an individual gives the broadest description and at the same time defines with sufficient accuracy the periods of growth. If the amounts of increment are shown diagrammatically on the scale of years, the result is what is known as a curve of growth. There is at first a very rapid upward progress and then the curve gradually falls until a period of comparative level is reached, then rises again and proceeds until it comes to final rest; this is the general outline of the curve of both height and weight.

To describe it in greater detail, there is first a period of rapid growth in the early years of life. The annual increase gradually drops until between six and eight years, when it almost stops, and the relatively level curve continues until the sudden rise which is known as the prepubertal acceleration. In the case of girls, the rapid rise comes a year or two earlier than with boys, the rate of increase

having previously been distinctly lower, and for two or three years they outstrip their male competitors in the race for maturity until about the age of sixteen, when, generally speaking, their period of growth is over, the increase after that time being relatively small. In the case of boys, the increase goes on until about eighteen or nineteen years, when the curve in their case also tends to the level.

This does not mean that there is no growth after sixteen in the case of girls, or after eighteen in the case of boys. Growth in height continues until about the age of twenty-five, and some investigators have found that even after that age there is a slow increase in height up to about thirty. The curve must be varied again when it applies to weight. Increase in weight continues, as a rule, until it reaches its maximum at about thirty; this, of course, refers entirely to normal increase of weight and not to those tendencies that manifest themselves towards middle age.

Now this period of rapid increase is the time of transition from boyhood and girlhood proper to adolescence. It is preceded by two or three years of pause in growth and general stability between the ages of eight and twelve, when the characters of boyhood and girlhood seem to be those of a relatively ancient stage in racial development. Mental as well as physical characteristics are so well adjusted as to appear permanent. The normal boy or girl during this period is thoroughly healthy, exceedingly active and well-controlled. The rapid increase afterwards is something that would hardly be expected. It will appear in detail how the onset of adolescence disturbs the whole mental and moral constitution of the individual together with



the physical, and that the resulting changes are of the most far-reaching importance.

It must be remembered that the curve of increase is subject to individual differences. While it will be found, as a rule, that few individuals depart very far from the averages represented, yet in some cases the period of rapid increase starts early because of some circumstance that favours precocity, or, on the other hand, it may be retarded owing to some influence tending to arrest. The curve of growth is also influenced by climatic conditions; in general, the warmer the climate the sooner the period of puberty arrives. In tropical countries, the beginning of puberty is about the age of ten or eleven, as against thirteen or fourteen in colder climates. Again, nutrition makes an important difference in the conformation of the curve. It has been found that on the whole the rapid increase comes earlier in the case of the well-to-do than with the labouring classes. But this is compensated by the fact that the more poorly fed classes, as represented amongst school children, after a year's average retardation seem fully to catch up with the well-to-do. That is, when they get the full impetus of the growth impulse they seem to make up for lost time and soon overtake their more fortunate companions.

Then, again, heredity has a bearing upon the curve, particularly as regards its limits. Certain races are naturally small and others are naturally large. The maximum of growth is determined by heredity and has very little to do with the circumstances of life. This applies to the individual only, as it is quite probable that in the course of racial evolution the circumstances of life have had a determining effect as constituting

the selecting environment. But it is not easy to solve the problem of racial diversity by reference to natural environment. However one thinks of the origin of humanity, whether it was through a few individuals produced by rapid mutation or through a whole species emerging by slow transition, it must be assumed that this most primitive race was relatively uniform in stature and appearance. How, then, came these great differences? Climate cannot be considered as a determining factor, because while the tallest people of the world are to be found in Scandinavia, north of these are the Eskimos who are among the shortest. Then, again, in tropical regions, tall and short people are to be found apparently indigenous in similar climatic areas. It is probable that in the long run the circumstances of life in Northern Europe did set a premium on size of body as well as qualities of strength and endurance, and also that the conditions of tropical areas have assisted in the production of other physical qualities. These differences are more fully explicable in terms of certain selective agencies arising among human beings themselves and dependent upon the forms and functions of communitary life. Chief among these is the dominant standard of beauty, the full discussion of which must be reserved for another connection. It is to be noted here that variations producing abnormally tall or short persons are eliminated because their departure from the standard renders them noticeable and even ridiculous, and thus they have little opportunity of mating and perpetuating their variations. The same agency has through selection emphasised the differences between man and woman; primitive woman is more nearly of the same height

and weight as man, equally with him capable of carrying on the functions of life, able to fight and to work. Subsequent evolution, because of the standard of feminine beauty, has produced an undersized and weak creature as compared with man, but possessed of a greater power of endurance.

Many authorities believe that the race is gradually growing smaller, and this position seems to be strengthened by the reports on physical deterioration. The problem is not easy of solution because of insufficiency of data. The conditions of life have greatly changed in the last half century, and nearly all the circumstances affecting individual growth for the worse have been accentuated, so it is probable that the average of the working urban population has fallen through general arrest. It must, however, be remembered that those conditions which universally arrest development and yet permit survival will, in the long run, shape organic adaptation and thus lower the hereditary as well as the actual measure of size. It is more than likely that under the conditions of city life large bodies will be found disadvantageous, and survival values will be placed upon certain types of physique which measured by the best, or even the average, must be regarded as degenerate. As off-setting these tendencies must be mentioned the cult and paraphernalia of physical exercise. The gymnasium, the athletic club, the Territorial encampment, with hundreds of minor devices all reflect the determination of the race to maintain its physical standard. There are, in addition, many professors who have invented systems guaranteed to raise any individual to the maximum of physical development. The exact value of this machinery is not yet

determined. Much investigation is required in order to ascertain the desirable limit of growth to fit any given set of conditions.

It is not yet known to what extent mental and physical characteristics due to heredity are correlated. There is a popular belief that the large man is slow mentally as well as physically, while possessing a correspondingly greater momentum ; it is also generally assumed that the small man compensates for lack of momentum by great nimbleness in thinking as well as in acting. The large man would therefore be most efficient in undertakings which are of a simple kind, but which require power ; while the finer activities would be best carried on by the smaller members of the community. All this is, of course, a surmise not yet tested by careful investigation. That there is a correlation through experience is easily observable ; one's size has an undoubted effect upon one's outlook in many directions.

It must be remembered that increase in height and weight implies the increase of a large number of special parts. Height means length of bone, not the length of one bone only but of a great many. There is in growth no one simple factor but always a great multiplicity of factors ; the complexity of growth appears most clearly from study of the increase of special organs. Instead of expansion according to a uniform scale, every part and organ of the body has its ratio of increase and rate of growth. The proportion among the organs, as well as with external and observable parts, is perpetually varying. Like the whole body, each part has its own period of accelerated and retarded growth ; at one time a particular organ is



increasing rapidly, then it seems to rest for a spell while some other organ or part forges ahead. It is often noticed how the bones and muscles alternate in their periods of rapid growth; the consequences are, on the one hand, the well-known cramps and growing pains; and, on the other, muscular looseness, inco-ordination and awkwardness.

An instructive illustration of the variety of scales discoverable in the growth of a single system is furnished by comparing the skeleton of an infant with that of an adult. They are so unlike that they can hardly be recognised as belonging to the same species. Were the skeleton of an infant to grow on a uniform scale, the result would resemble the gorilla, with an utterly misshapen chest, enormously long neck and arms, and short bandy legs.

The growing organs show relations to each other of a kind almost to make one favour the belief of Roux that there is in the body a struggle for existence in which the organs compete for the food supply in a manner comparable to that found in natural selection. The consequence is that at one time one organ and then another organ overcomes the others, and by a temporary monopoly of the food supply has its period of rapid growth.

Among the parts of the body the muscles occupy a unique place; they constitute the greater part of bodily weight and bulk and they are so clearly connected with health and efficiency that it is almost exclusively to them that regard is given in the various systems of physical education.

It might almost be said that the muscles present the most pressing problem of the present age. With

the exception of the finer muscles of the hand and throat, the muscular system seems to be a hindrance rather than an advantage in carrying on the majority of occupations provided by civilised life. Should this tendency be further exaggerated and made permanent, there is reason to believe that Mr. Wells' Martians provide a prototype for the further evolution of the human species. This universal neglect of the muscles among nearly all classes of the community has risen to a semi-consciousness, and supplies a motive for the cult of exercise which is so prominent a feature of the age. One is confronted in every direction by an imposing array of panaceas from the latest charlatan advertising in the daily papers up to those systems most fully accredited by medical authorities and dignified by appellations indicating their land of origin.

There is a gymnasium connected with almost every institution of learning, and many others are provided and supported by clubs and various public associations. Could the proverbial visitor from another planet arrive in a modern centre of civilisation, one of the most amusing spectacles provided for his entertainment would be the array of men, women, boys, girls, and even infants, arranged in rows and making absurd movements at the command of a leader, all in the belief, unconsciously accepted, that this fulfils the appointed task of a human body. If the muscular system is only for the purpose of assisting in the combustion of food, much valuable time might be saved by reducing the latter to the amount actually needed. It may be conceded that under the conditions of urban life artificial exercises may, when natural ones are impossible, prove to be beneficial,

but it is a long step from justification as hospital treatment to approval as a means of educating the young. In brief, the present unlicensed employment of formal exercises for all stages of growth constitutes one of the greatest dangers of the time—the more pronounced because unrecognised by those who, presumably, have the health of the community in hand. It is a pity that medical men, who have such full and exclusive care of the body, are so ignorant of its biological derivation and purpose.

It is usually contended by the advocates of artificial exercise that it serves to correct deficiencies. In the first place, no normal child brought up under appropriate conditions will manifest deficiencies requiring such treatment, and, again, the deficiencies in question are often merely departures from the average standard of appearance, in which case they do not of necessity have any relation to health and efficiency; or, they are variations from some scale of proportion obtained partly by averaging many individuals, and partly from the imagination of the system's inventor. An example is the chest of the British soldier. This comes fully up to the standard of appearance, but is well-known to be disadvantageous in use and the frequent cause of cardiac troubles. The whole difficulty is in the tendency to overlook the one test of an organ, and that is its use. The healthiest steam-engine or motor-car is the one that is able to run the longest time while developing the maximum of power. It was not the chest of the British soldier that won the Marathon race, but one that did the work in spite of appearances. These crude examples are intended to illustrate the fact

that the test of harmonious development lies in the efficiency of those functions which in various kinds of co-ordination constitute a healthy life. Attention to the sequence of play tendencies can be better trusted to accomplish this result than the most ingenious "professor." Considered as the product of evolution, the body is the summation of an infinite number of variations, each of which has obtained its place and permanency because it increased efficiency in the struggle for existence.

The problem of physical education in so far as it is concerned with action, is not one of muscular development but of co-ordination and adjustment, which happens to be an affair of the nervous system. It is here that physical education by artificial means proves itself pernicious. All the objections to formal training in general apply with special force to habits of action. The most perfect performer with Indian clubs is not assisted by the co-ordination thus established toward any other objective. This, however, is not all; it is being discovered that natural activities constitute the most necessary means of education; they are the organisers of experiences through which comes mental growth. Artificial exercises are, therefore, a frittering away of important educational resources by their employment in useless and often harmful directions.

The specific changes due to the appearance of the secondary sexual characters may be considered adequately known. Most of them are quite obvious, such as the lowering of the voice in the case of boys, the new growth of hair, the mammary and pelvic development of girls with their new periodicity, and



all other changes that fit maturing individuals for the functions of paternity and maternity. The whole of growth, physical and mental, beyond the level period of the curve already mentioned, may be regarded as a secondary sexual character inasmuch as further development is due to the stimulus of the reproductive function.

### III.

#### NORMAL DEVELOPMENT OF THE INSTINCTS AND EMOTIONS.

THE conclusion of the previous chapter is that adolescence on its physiological side implies not only general increase in stature and weight, but an increase of each part and organ of the body at its own rate, and in partial independence of that of all others. The resulting problem of physical training is largely unsolved. The various "systems" must be taken as mere tentative efforts, and, until it is possible to clarify the factors of ultimate importance, the whole matter must be regarded as still in its infancy. But if it is difficult to define health or harmonious development on the physiological side, the problem is psychologically one of even greater difficulty. The inadequacy of educational machinery is evident, and educationalists still suffer from the delusion that psychological development is a matter of the intellect. While it is certain that intellectual abilities and tendencies undergo a far-reaching transformation, it must be remembered that these follow and are subsidiary to transformations of an emotional character. The central fact of adolescence is emotional change. The extent of this change becomes apparent by recalling the condition existing before the period of rapid development. The child of nine to twelve is largely stationary in the sense that physical development is slow, that the organs of the body are so

adapted as to function well together, that the child is less emotional, less imaginative, with automatisms more definite than at any time during the process of growth. The condition at this period is so stable that Dr. Hall, as was noted above, believes it to be the reflection in the individual of that early maturity which probably characterised remote human ancestry, and an approximation to which may be witnessed among existing savages. The general distinction between savagery and civilisation, translated into terms of individual development, describes most adequately the transformation from childhood to adulthood. This is a matter of the emotions.

It may, however, be contended that child, and savage as well, possess the same basic emotions as the adolescent or the civilised adult. This is true, but the difference consists in the newer organisation and orientation of the emotional factors.

The child is in all essential respects egoistic and self-centred, and the most general and appropriate description of adolescence is that it implies an outward orientation of the feeling-life. This is accomplished through the development of a new order of sentiments, or systems of emotional regard, with the consequent formation of a new series of values and, therefore, of new interests. Childish sentiments are directed to the immediate environment of things pertaining to the self; adolescent sentiments are directed to a variety of objects most of which require that the self be adapted to them. It is not to be understood from this that self feeling is deficient; it is never so acutely present in consciousness as just now, but it is of a different kind.

The important difference is, then, to be discovered in the nature of the objects toward which the new sentiments direct themselves. These are either ideals or things standing in close or symbolic relation to ideals. It would be expected that such far-reaching changes in feeling-life would provide a new impulse to the imagination—a mental function which is the most important instrument of the emotions. What happens at an early stage of the child's life now repeats itself. The world of the imagination is present so vividly as to obscure and render stale and commonplace the things of actual life. The figure of speech formerly used, describing life as a trajectory, must now be given up, at any rate as regards anything to be described as progress. One proceeds from this point, not in terms of a push from behind, but by being drawn by what the future is thought to contain. This fact generalised into a social formula implies that the progress of the race has been in terms of an idealised condition conceived as attainable, whether this be a Utopia, or a Heaven. It is a curious paradox that the term "Utopia" should stand for everything deemed impracticable and merely visionary. A Utopia, is in fact, the very block and tackle of human advancement; it not only unifies the thoughts and hopes of a nation or a period, but, what is more important, provides a programme of common activity. To prepare the way for a "Messiah" ensures an efficient national existence; whether the condition desired is illusory or not makes very little difference; action with reference to it has taken place, and this is what counts in history. Probably no Utopia would be workable if it could be realised in all its details,



but it provides the motive for a practical step which forms the basis for the projection of a new ideal for humanity. What is thus true of the race is equally true in individual life, and the significance of adolescence is to be recognised in the fact that its chief business is the formation and projection of ideals ; the rest of life is no more than an endeavour to construct the building according to the plan. The vision is, to be sure, obscured and perhaps lost in middle life ; at any rate, its colours are dimmed and its outline grows less definite. This state of affairs is commonly known as wisdom derived from practical experience, which, as everyone knows, is the greatest enemy of either individual or social life.

One simple and early mode in which the outward tending impulse shows itself is the new interest in the world lying beyond the limits of the immediate surroundings. The school with its wearisome restrictions, the associates of early years, the habits of life grow stale ; even the authority of parents is almost unbearable, and the desire to see what the world contains, foreshadowed during childhood in truancy, now becomes an oppressive longing. With the re-birth of the imagination, interest in the past of mankind brings with it the desire to view the monuments associated with historical records. It is well known that if travel becomes possible only later in life these monuments have a diminished significance, a weakened symbolic value and appear small, disappointing and frequently trivial. The obvious conclusion from this is that the educational regimen should include travel as a part of its programme. A provision of this character, while perhaps limiting the scope of book knowledge, or second-hand

experience, would be more in accordance with the inclinations and needs of the adolescent nature; it would, moreover, provide that groundwork of actual experience so necessary to give meaning and interest to subsequent reading.

The problem that is increasingly present to the adolescent is the simple one of what he is to do in life. This problem has, however, limiting conditions of a variety of kinds, such as the range of choice within a certain social class, the probability of a ready-made career and the inheritance of fortune. Within these limits again the abounding hopefulness of these years may prevent the problem becoming definite and perplexing, but the time arrives when it must be settled. The chief impulse throughout is what is known as ambition. The set of experiences covered by this term show, under analysis, relations to the preparatory experiences of childhood on the one hand and to the forms of hero-worship on the other. Childish interest in occupation is chiefly determined by the more obvious activities in the community—various persons who use tools or control machinery make the most striking appeal. In childhood the social factor is not, therefore, of dominating importance unless it takes the form of an educational system which utilises the child's spontaneous interests and directs them into the series of activities allied to the generic occupations discoverable in racial history. These preparatory experiences, extensive or limited, by their contribution of permanent interests or of mere subconscious impulses, constitute the material on which the synthesising and projecting activity of adolescence has to operate. The other important factor of hero-worship is, for late

childhood and early adolescence, chiefly a self-regard in dramatic exercises. The adolescent sees himself as the hero of even the cheapest story. He conceives himself as occupying the centre of interest and all the events transpiring take on for him a personal relation. This tendency is even more pronounced in the dramatic regard for the great historical figures—the life of Napoleon is repeated in the imaginations of a high proportion of adolescents. But performances of a striking order appeal with diminished force in later adolescence when sentiments directed to the more abstract human qualities become stronger and more constant. The human qualities are not, however, considered as mere abstractions; they make their appeal through the personalities of their great exemplars. The world is thus for the adolescent a great theatre in which the chief actors in all departments of life are brought out and made to play for him, and nearly all of this is done for the sake of determining how much he himself likes the *rôle*. It must be remembered that the world's heroes have not appeared at random, they are the final expression of social forces, chiefly of an occupational kind, and fall within the limits of several great types. And since these types are connected with the interests of childhood and the experiences consequent upon them, a relation is established between any type and its final focalisation in a great example. This appears to be the psychological machinery by means of which the occupations are transmitted from one generation to another. Thus, the chief value of great men is to fertilise the imagination of adolescents. The details of any particular case will fall within the limits of the conditions provided; so that with rigidity

of class the possibility of choice of career is diminished. Where this is associated with any degree of ancestor-worship, so that the father or remoter ancestor is the greatest of heroes, occupational transmission will follow the lines of organic transmission. From the above it is clear that one value of democracy lies in the fact that it enlarges the range of imaginative contemplation.

In course of time one class of heroes drives the others from the stage and the choice of a career, in so far as it lies in the individual's hands, is accomplished. The chief sentiment in adolescent ambition is necessarily self-regarding, yet the kind of self-regard is essentially different from that of childhood; it focusses upon something in the future which is to be individual and at the same time to play a part in the social order; it concerns not what the youth is *to do* but what he is *to be*, and clearly recognises the insufficiency of his present self.

It is well known that until maturity is almost reached the capacity to receive rather than to express is the distinguishing feature of adolescence. This does not imply that expression of some kind does not take place, but the modes of expression are clumsy and powerful rather than refined. Many investigations show that interest in drawing and painting returns after having been in abeyance for a number of years; the art impulse is probably of a purer kind than at any other time; it has less regard alike for outside motives and for the mere mechanics of artistic expression—it is the simple desire to preserve a record of those idealised situations which have served to increase the intensity of emotional life. The



unhampered productions of adolescence contain the essentials of all art—meaning and spirit. As to manner, anything will serve, often the crudest imitations of some admired master. Unfortunately, teachers in this department do everything in their power to drag attention away from the matter and to focus it upon the form. The result of these ministrations is usually the production of a trained technician whose creative impulse is gone for ever. It is only another case of originality blasted by the development of a premature critical tendency. This is most pronounced in the case of poetry where training in technique is less a matter of instruction than in the case of painting. All adolescents are poets by nature and nearly all attempt at some time to express themselves in verses. Such verses are seldom examples of technical excellence and are treated by adults with withering cynicism. It is a curious fact that boys in college are made to write verses in a dead language, while those they attempt spontaneously in the vernacular usually meet with laughter. The consequence is that the adolescent soon regards his verses in the light of a secret sin, so they are hidden or destroyed, and creative impulse, possibly of a high order, is again sacrificed to the self-sufficiency of adults. But interest in poetry remains; it is no longer like that of the child which revels in nursery jingles, nor that of pre-adolescence which is satisfied with ballads or an array of couplets, but is now chiefly in poetry of the lyrical order. While this trend of the mind suggests opportunities of humanistic study as the proper regimen, it is too often met by the adult conviction that no encouragement should be given to what is believed to be an over-development of sentimentality,

so training is usually focussed upon those stale commonplaces which an inept adulthood believes are the beginning and end of wisdom.

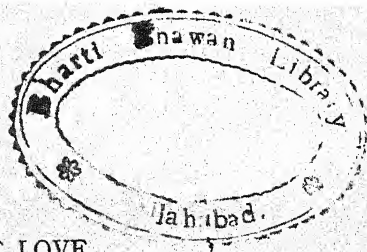
Another characteristic of the period is that Nature makes a new important appeal. The change that may be noted alike in racial evolution and individual development has not yet been adequately clarified by psychology, but may, perhaps, be best described as a change from the projection of images to the projection of moods. In early childhood the tendency known as anthropomorphic is all dominant, objects in nature are thought to conceal beings possessed of human or superhuman characteristics. This corresponds precisely with the mythopoeic stage of racial evolution which has produced that great substratum of mythology and folklore in which most of the forms of art and religion are rooted. But the development of the race has coincided with a gradual extirpation from Nature of agencies of anthropomorphic creation, the result being a conception of the scientific or positivist order. In this particular, racial development seems rather to be behind that of the individual in which the mechanical mode of conception is more characteristic of the stable period from nine to twelve than of adolescence. If the parallelism is insisted upon it suggests that the scientific attitude toward Nature with its consequent mechanical interpretation is characteristic of a race in the later stages of savagery rather than in that of civilisation. The adolescent feeling for Nature implies neither mythological forms nor metaphysical essences, it is an emotional attitude which subsumes and reintegrates those instinctive attitudes toward Nature which we must suppose the emotions to be. It is thus at once the deepest and

the highest manifestation of the personality. The projection of a mood into a landscape is yet far from complete achievement by painters or poets, but indications are not wanting that these arts will in the future reach a new plane of Nature feeling.

There are certain general characteristics of the adolescent period which require notice. It is obvious that the formation of new sentiments is not a matter of a day; indeed, the whole subsequent period of growth is hardly adequate, and in consequence of this it is not surprising to find for a long time alternations between the new state and the old—between attitudes of the most exalted altruism and those of the meanest selfishness. The perpetual endeavour to gain a foothold on the higher plane of living provides a condition for those struggles of the spirit with which these years abound. The adolescent knows no halfway station; he is not yet come to that working arrangement with himself which is so easily recognisable in adults. Although possessed of emotions of overpowering strength, with channels of discharge not yet established, the youth nevertheless seizes every opportunity to bring emotional life to a higher intensity; resort to the usual artificial modes of stimulation is frequent. The consequence is that these years are passed in perpetual alternation of excitement and depression, this latter condition often growing into an all-pervading mood which may last for days and even weeks. The melancholy of adolescence is seldom able to define itself, it covers like a fog the whole landscape of the spirit and is intensified by a vague longing, the objects of which are unknown.

IV.

ADOLESCENT LOVE.



THE psychology of the sentiments finds one of its most important examples in love between the sexes, and the development of this sentiment is one of the eminently significant phases of growth. It is necessary to note that there is no difference in type of organisation and mode of formation between this and other sentiments; that which distinguishes it is the fact that the emotional system has as a core the reproductive instinct; the distinction, however, between the two is clearly recognised. Other sentiments equally orientate themselves along the lines indicated by instinct, as, for example, the love of the mother for her child. If these facts are admitted, it is clear that love between the sexes depends for its growth upon the conditions found necessary in any other case, namely, a succession of emotional experiences in relation to an object. This statement is in contradiction to the common supposition that it is possible for the sentiment to spring into existence fully formed. Cases of this apparent character depend, firstly, upon unusual impressionability—the one who falls in love at first sight has probably done so often before; they depend, secondly, upon the fact of what is commonly called being “in love with love,” or, rather, with an imaginary member of the opposite sex; the result is a certain readiness to fix this sentiment on any concrete person who seems to approximate to suitability. Disqualifications



usually come to light later, but the sentiment developed toward an imaginary object is still amenable to the rule; it depends upon an imaginary set of experiences. Much of adolescent day-dreaming follows the lines here indicated. Love of a real kind toward a real person is then dependent upon the usual conditions of the growth of sentiments, conditions of actual and of more or less prolonged experience. The failure to run smoothly helps in the making of true love.

It will be seen that a description of the relations between the sexes traverses the whole of the psychological field; this because the direct bearing of the sentiment, which may be assumed to be sufficiently known, is of minor importance for the present purpose as compared with the irradiations and indirect consequences. No account can be regarded as complete which limits itself to human manifestations, for an explanation of these leads back to pre-human beginnings. Among nearly all the higher animals there is what is known as the mating season, in which appears the primitive counterpart of human courtship. Facts pertaining to the mating season are grouped biologically as those of sexual selection. In his book on "*The Descent of Man*," Darwin treats the principle of sexual selection as supplementary to that of natural selection, which he finds inadequate to explain certain facts of development. All characteristics useful in the struggle for the means of subsistence naturally come under the latter principle, but those evolved in competition among the members of the same species for the privilege of producing the next generation can hardly be explained in terms of struggle for existence.

The differences in appearance and behaviour as between the sexes among many species of birds and mammals are well known.

Weapons of offence as claws, teeth, horns and antlers have additional growth with its counterpart in the increased ferocity of the mating season; all this is preparation for the deadly combat which is the form that competition for female favour takes with many animals. The result of the struggle is that the strongest and fiercest is enabled to mate and so perpetuate his characteristics. Among other animals, especially birds, competition takes rather the form of display either of song or of markings; in this way a premium is put upon gorgeous plumage combined with superior ability in antics and strutting. The qualities thus contributed to the species are those commonly denominated beautiful, and Darwin goes so far as to maintain that the development of beauty in animal forms is dependent upon sexual selection. Other naturalists find ground for disagreement, and ridicule the idea that a female bird can possess a taste so refined as to pass judgment upon æsthetic differences, say, in the iridescence of the peacock's plumage. These writers maintain that the facts of sexual selection can be accounted for as facts of natural selection; that gorgeous plumage is useful for recognition purposes, and, that, so far as the female is concerned, bright colours have a stimulating effect. This latter fact is illustrated in the action of certain plainly marked birds that bring together at the mating season coloured pebbles or bits of glass. It is probable, however, that Darwin's interpretation is near the truth; not that the female possesses a highly developed

æsthetic judgment, but that the diathesis of the mating season is that which evolves later into what human beings recognise as a sense of beauty. The facts are quite clear that selection takes place by the female, whose favours are conferred upon the winners of competitions among the males, and, furthermore, that this selection leads to a differentiation between the sexes in appearance and behaviour. Among human beings the mode of selection has been largely reversed, with the consequence that beauty has come to be a feminine possession. The standard of beauty as a factor in selection has been under-estimated in accounts of human development; it is probable that most racial differences are referable to its action.

Before tracing the stages in the development of love during adolescence, it is well to inquire what affection between the sexes implies during childhood. The field is one of great uncertainty; some investigators believe that infantile love is normal and is a foreshadowing of the later relation, just as the love of dolls is thought by many to be a childish expression of the maternal instinct. It is possible, however, that these cases may be explained by means of imitation and other functions than those to which they are referred. There is little evidence to show an appreciation of sexual differences before adolescence under natural primitive conditions, whereas in civilised life children are never permitted to forget that they are boys and girls; a distinction imposed by ignorant elders who endeavour in all ways to make children adults before their time. Many seem to find something simply charming in the sweethearting of children and encourage them in little lover-like practices. Common-

sense hardly needs the assistance of psychology in condemning this; besides the absurd and unnatural attitude thus cultivated, there is the risk that these practices may entail, in sexual prematurity, the most calamitous consequences.

Juvenile love, as manifested during the first half of adolescence, is biologically the most interesting of all the forms that adolescence may assume; it is the true counterpart in individual development of the mating season among the lower animals. The boy suddenly begins to take an interest in his own appearance; for the first time in his life he voluntarily attends to his hair and teeth, his boots and linen; he becomes punctilious in regard to his clothing, and the choice of neck-ties is an important event. When in the company of other boys and in the presence of girls, he seeks occasions for showing his courage and strength; he willingly attacks the largest boy and incurs risk to limb in feats of skill and prowess. In the presence of the loved one he is awkward and even paralysed in expression; he never ventures to declare himself but makes use of only the vaguest hints, and often contents himself with seeing her from afar. Development in the girl is on lines similar to those observable during the mating season; she preserves an attitude of seeming indifference and is most careful not to give the attention which the boy is struggling to attract; at the same time she is seeing and understanding everything.

Another phase of the same period is that known as love of an older person. The shifting of adolescent affection along the age scale is a usual, if not universal, tendency. In addition to the motives operating between boys and girls of the same age, there is in love



of the older person a larger element of respect and the mystery of complete development joined, as a rule, with sympathetic and gracious treatment. The situation is often one that gives opportunity for beneficial influence and guidance; the older person must not be too much flattered by adolescent affection; it is a passing phase and involves the projection of an ideal to which the older person may, in reality, only remotely approximate. Now and then an adult will be found so deficient in either intellect or character as to treat the matter seriously or selfishly. Mating of this kind almost universally faces calamity.

There is frequently, if not usually, in mid-adolescence a period succeeding upon that already described, of the withdrawal of the two sexes from each other. It is an inhibition due to the comparative intensity of interests; the eyes of the youth are upon the world and his own future; his moral and religious struggle is reaching its highest intensity; he, therefore, permits as few thoughts as possible about the opposite sex; it is the period when the seclusion of the cloister is needful to clarify problems and rectify views. The monastery is the social device arranged for those who continue permanently at this level of development; the college is for those who are expected to pass through it; masculine company is far more congenial than feminine; woman is mystifying and baffling, and there are too many other things in life with the same qualities that demand attention much more imperiously than she does. This attitude of withdrawal and inhibition is so important a factor as to give rise to an intense resentment toward co-education during the first university years. What has been said of boys probably applies,

though not in equal degree, to girls. Many girls now desire the life of the convent; irrevocable choice at this time in such matters is unfortunate, for this is only a phase of development.

When adolescent love comes again it is toward the close of the period, and it has the characteristics of the final mating time. Both biology and psychology prescribe marriage at the beginning of adulthood, and it would probably come quite naturally if free from the meddlesome wisdom of older persons; to mate later than the middle twenties involves disadvantages for which no economic considerations can compensate.

Studies have been made which show that love between the sexes is not of a general diffused kind but establishes itself with reference to specific points in appearance, behaviour or character. As regards the choice of men there is no doubt that the standard of beauty is the dominating factor; the general standard is accepted but modified to suit individual requirements, the outcome partly of idiosyncracies and partly of earlier experience. As regards the choice of women there is justification for the common view that appearance makes less appeal than other qualities; although this is truer of later periods than of adolescence. Within the personal standard of beauty any characteristic of appearance may take precedence over all others and even furnish compensation for them. The majority of people fall in love with eyes, which may be regarded as the most personal of all features, surpassing the rest in expressiveness. After the right kind of eyes, the demand next in order seems to be for white and regular teeth; few things are so destructive to the affections as an

absence of this condition. The hair comes in for its share of consideration—colour, length, straightness or waviness, curls, the method of arranging it—all these may be critical in the development of love. Girls protest their abhorrence of baldness, from which they seemingly recover later. The kind of nose is also an important condition, preference being divided between the two great types. What has been said of these features applies with equal force to all others; there is no detail that may not become the focussing point of someone's adoration. Persons have been known to be in love with a voice, overlooking many deficiencies in its possessor. This normal tendency for love to be specific and personal often approaches and overpasses the limits of normality in what is known as love fetishism, in which a bit of wearing apparel as a glove or a handkerchief may be as great excitant of the affections as the presence of the loved one.

In spite of the diversity that has been noticed, there are certain controlling factors discoverable in selection. It was formerly thought that opposites in type were most attracted to each other, but the contrary appears to be the case. Each person is fairly optimistic about his own appearance, unless it meets with grave disapproval from others. Too great dissimilarity, moreover, involves a feeling of strangeness which is akin to repulsion; this appears in racial differences. What is true of appearance is equally true of mental and moral characteristics, and of habits and customs; foreign and morganatic marriages are usually failures, as the conditions preclude true unity.

The preceding discussion is perhaps sufficient to show love between the sexes as a fact of primary

significance for every department of life. By its irradiations it observes ends far beyond those of its biological intention, and all the characteristics appearing during adolescence are directly, or indirectly, its products. Like the overflow of a great river it irrigates and fertilises great tracts of life's territory, or, it may, on the other hand, cut out its course and persist as a torrent, leaving the nature desiccated and barren. Attention has already been drawn to the difference between the higher and lower races and the consequences for civilisation of an extended adolescence; the converse of this holds with equal force, that any circumstance which abbreviates the period by a premature nubility involves arrest of development. The community fails to realise the sacrifice constantly made in the best qualities of its youth, or else it would not for a moment tolerate the machinery of pornography which has been a prime element in the decay of the best in civilisations. The value of asceticism may be an open question as regards later periods of life, but for the years of growth it cannot be too strongly affirmed. The whole effort should be directed to what Dr. Hall calls "the long circuiting of the instinct"; the derivation from it of all those motives which give meaning to life. What this may accomplish is exemplified in the Dantes and Petrarchs, and in nobility and greatness wherever found.



SCEPTICISM: THE PERIOD OF STORM AND  
STRESS.

THE chief facts illustrating the new orientation of thought and feeling are presented in adolescent religion. Religious sentiment is, at least for a time, the dominant one in the youthful character. The outward-going tendency carries the adolescent to the outer limits of life and the ultimate confines of the universe. At no other time of life is the problem as to the inner meaning of things more pressing than now; at no other time are ultimate conceptions so much a matter of daily thought. It has already become clear that religion and religious institutions have their value for human life in that they are able to assist in its great crises. It is probable that the continued existence of these institutions depends upon the requirements of human nature in times of great stress; religion supplies a solution for the great problems that then arise; it provides an outlet for certain feelings and assists in calming others. It is, therefore, a matter of interest to find how the adolescent reacts to the religious influences now brought to bear upon him.

Adolescent religious experience manifests two great phases corresponding to the two great constituents of the religious system. It is first of all an attitude of feeling in which thought plays a minor part; this is

succeeded by a period of critical examination which implies the exercise of reason that now appears for the first time in individual life. The alternating domination of thought and feeling is easily discernible in the history of religion. Rationalism came most completely into its own during the eighteenth century, but after having apparently destroyed the whole groundwork of belief, it succumbed to a feeling of inadequacy and was succeeded by a period of pietism and romanticism. In like manner the present may be regarded as a period of scepticism ; the so-called warfare between science and religion has apparently resulted in a victory for the former ; many contemplate the possible irreligion of the future anxiously or exultingly as they occupy the one standpoint or the other, but there are already foreshadowings of the reaction that may not be far distant ; the countless small cults found everywhere are indicative of the fact that humanity will have a religion at all costs. If it is remembered that Christianity was at the beginning a discredited cult of the poor and ignorant projected into the world just growing tired of rationalism, it is not difficult to foretell the kind of future that the modern world is approaching. Most of the religious difficulties in history are referable to incomplete adjustment of the personal attitude of worship and the system of beliefs supplied by social tradition, and it will be found that individual difficulties come from the same cause. Human nature when confronted with a system of unacceptable dogmas resorts to other modes of emotional exercise, such as poetry and music, which do not necessitate systems of belief. Among religious persons every variety is to be found ranging from the extreme of emotional fanaticism

to an equally extreme logical exercise concerned with a rigid theological system. The progress of the normal adolescent is through all these varieties with a final adjustment determined by his character.

The first characteristic of adolescent religion to be noted is its contrast with that of childhood. The difference may be broadly described as that between the Old and the New Testament, between the Law and the Gospel. It is to children that the stories of the Old Testament make a strong and peculiar appeal; they are striking and dramatic, they direct the imagination to the actions of kings and warriors, they suggest the richness of oriental pageantry, and, above all, they involve that system of control by personal authority operating through tangible rewards and punishments which children find applied to themselves.

X It has been suggested that most of the world's great religions are required to meet the different phases of individual life. For example, the characteristic attitude of old age is that reflected in Buddhism, the philosophy of quiescence, of the negation of all striving; at the other end of the scale the religion best suited for childhood is Mohammedanism, the lineal descendant of the Hebraic system of the Old Testament. This suggestion may have some value for the difficult problem of religious education; by neglecting labels and dissolving prejudice an approach might seem open to a vein of the most valuable educational material. The great obstacle to this pedagogical method is the wholly unfounded conviction that anything once learned always persists; a failure to remember that beliefs, like other mental functions during childhood, are perpetually growing and changing in growth. It is well known

to teachers that the New Testament makes only a slight appeal to childhood, only a few of its dramatic and unessential incidents are seized upon ; certain stories of the Child Jesus are undoubtedly of value, but the best of these are to be found in the mass of legends that grew up later. It seems indeed a pity to render stale from over-familiarity the gospel story which can only be understood in its extraneous aspects before adolescence, but which is charged at this time with a wholly new significance and for the inner spirit of which the perceptive organs are now developed.

✓ The central experience of adolescent religion is that known as "conversion." It must be remembered in discussing the matter that the acuteness of the experience varies with the circumstances. In modern times the more violent forms are found among the Nonconformist sects as compared with any one of the historical Churches. The probable reason is that these sects most truly represent the Reformation spirit with its emphasis upon "justification by faith," which is an appeal to personal experience. These differences, however, do not affect the point of importance, which is that "conversion" is peculiarly a phenomenon of adolescence. The history of evangelical movements is instructive, but not altogether without stain as regards their exploitation of adolescent psychoses. The difficulty has been that they have always professed to do more for the adolescent than they have actually achieved.

✓ The psychological factors in "conversion" are inherent in the problem set by adolescent nature ; it is that of finding ways and means by which the racial instinct may be long-circuited ; of discovering channels



through which this reservoir of vital energy may irrigate and render fertile all the fields of life, the transformation of fleshly into spiritual and ideal forms. The eternal conflict in the youthful nature is that between what it is and what it desires to become; of the vision of the "promised land" and the desert in which it is forced to wander; of a moment's life on the mountain top with a seemingly perpetual existence in the valley. The quest for sanctity is perpetually foiled by the bondage of the flesh. These facts render the adolescent particularly open to religious persuasion; he welcomes the suggestion that by accepting the plan of the evangelist he will be free from all difficulties; he is told that a new life will be implanted in him which will be eternally on that high plane of sanctity to which he aspires. He is, of course, foredoomed to disappointment; the hold of the flesh is never relaxed but asserts itself again and again; the quest for sanctity is not consummated in a moment but involves a lifelong effort.

When religion comes to be studied in the light of its function rather than in that of the rationality of its dogmas, it will receive from the facts of adolescent conversion its highest justification. The significance of the doctrine of regeneration is not to be found in the arguments advanced by the theologian but in the fact that it is the very block and tackle of civilisation. If it is admitted that the higher stages of human evolution beyond savagery are dependent upon the growth of such instrumentalities as will inhibit the lower and make possible the higher uses of the reproductive instinct, then it is clear that regeneration marks off civilisation from savagery as well as adulthood from childhood. To adapt Schopenhauer's phrase "one is born again" and

"to the service of the species," but in all those ranges of corporate life which the best societies manifest.

In broad interpretation religion may be taken as the expression of the communitary consciousness. Every religious body is a close corporation which provides for each of its members a set of ideas and ideals which he holds in common with all the others. The conception of duty from the earliest clan totem to the latest positivist apotheosis of humanity has been a reflection of group life itself. Every supernatural code of laws has had in view the adjustment of individual conduct so as to subserve tribal or national ends. It is clear, then, that religion viewed as a human institution is also in the service of the species; and it is not accidental that its central function in practical affairs has been that of controlling the relations of men and women. It is, however, a curious fact that religion, especially in the case of Christianity, should have regarded the sex instinct as its great enemy, for however valuable, and even necessary, the ascetic ideal may be, its full achievement would shut off all the motive forces of life and the fully sanctified soul would be merely a case of dementia præcox. The fact can, however, be explained. In any struggle the opposing factor comes to be regarded as an enemy—perhaps the greatest enemy a sculptor has is the clay in which he works. The division of the universe into hostile camps, with the forces of righteousness and unrighteousness arrayed against each other, entered the Christian system as everyone knows through the Manichæism of Saint Augustine, who very fortunately left the explanatory psychological document in his "Confessions." The intensity of his struggle

with the flesh and his utilisation of Christianity for climbing towards an idealism has found its counterpart in the experience of every generation of adolescents to the present day.

The period succeeding that of religious experience, and growing naturally out of it, is that of scepticism. It is brought about through a number of agencies. In the first place, the adolescent discovers that his moral difficulties are not solved at a stroke by conversion; that the new life is still rather a matter of ideal contemplation than of practical achievement, and along with this goes a suggestion of disillusionment regarding older persons. It is a curious fact that adults in any talk with adolescents on moral matters assume for the purpose the high moral pedestal that implies a blameless life. Every old reprobate talks to his son as if he himself were little short of sanctification. This implication is probably never intended, but the adolescent, not yet habituated to hypocrisy, identifies personal speech with personal conduct; he discovers the disparity in course of time and learns that even the teachers of religion are able to compromise with the ideal in many of the small matters of life. The consequence is disillusionment regarding most of the individuals venerated as examples.

The most important factor in the period of doubt is the instrument of scepticism itself, namely, reason, which now for the first time appears in its theoretical and critical form. Until now the youth has been receptive of everything; his intellectual equipment has been given to him from outside and accepted without question in so far as it accorded with his previous habits and the influence of those he took as authorities; personal

weight and influence have counted for more than the value of ideas. Any material not according with these conditions is merely refused admittance or is docked into a hidden corner of the intellectual jumble-shop. Among these acceptances, and occupying the foremost place, is the system of theology delivered complete in every detail, and, as a rule, of the most rigidly systematic kind; if it be touched in any particular place there is alarm lest the whole structure be threatened. The problem of the young man for several years is to put his mind in order.

This new desire for consistency may be interpreted as a phase in the assertion of individuality; it is, to be sure, accentuated by modern intellectual tendencies of a scientific order. These are so pronounced as to give ground for the suggestion that has been made, that it is immoral to believe that for which there is no evidence. This new responsibility of belief to reason operating upon a groundwork of evidence opens a way for scepticism to attack a system founded upon authority. It might, then, be expected that the kinds of doubt would be those lying close to this point of intellectual transition. First in order of time and prevalence come doubts as to the miracles recorded in the Bible; following upon these are those regarding inspiration, the Resurrection of Jesus and the immortality of the soul. The hiatus between the current *credo* of scientific and practical life, based on the uniformity of Nature, and the theological system, having the prestige of many generations of believers, provides for the adolescent his most serious problem, demanding an adjustment which older persons seldom feel necessary. Naturally much will depend on the outcome. To



stifle doubt and settle back into conformity closes many avenues which intellectual integrity requires to be kept open.

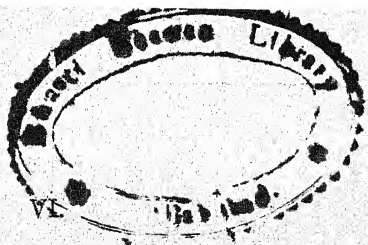
Now, the central difficulty is not the intellectual one but, rather, concerns the emotions. What is mostly needed at this time is a provisional system of values, a working arrangement with regard to the large issues of life; this organisation of the emotional system being closely attached to the elements of belief is forced to crumble with them. Were scepticism only a logical exercise it would matter little, but the adolescent feels that the struggle is one of life and death; that the whole significance and value of existence is dependent upon his saving the system intact from the disintegrating action of reason. When he finds himself forced to concede one cherished belief after another he is driven into gloom and despair; the whole universe seems to fall about him like a house of cards and the monster of doubt does not stop with this first act of demolition, but carries its ravages to the extreme boundary—it becomes that morbid, ingrown, double-edged kind which doubts the existence of the doubter; the world resolves itself into shadows and shams. It is probable that the Cartesian principle of philosophy works only harm in the adolescent; far too much of personal life is placed at its mercy.

As to the treatment to be accorded the adolescent during the period of storm and stress, it is clearly a case for the proverb concerning prevention and cure. Religious teachers should remember that the full growth of a human soul is more important than adherence to any theological system. Strangely enough, many

parents can be found who apparently care more for the system than for the good of their own children. No attack is here intended on religious education, but only on that premature indoctrination with dogma which so frequently usurps the name of religion. The need for system arrives in its good time, and the wise instructor will see that it has generous proportions and plastic boundaries; this will save him from the necessity of repeating to the youth, who comes to him in the throes of doubt, the old and useless formula that if faith is strong enough the doubts will disappear of themselves. Beyond this the only prescription that can be given is that of assistance toward other interests, of close contact with Nature, and, above all, of work; the world cannot remain an illusory dream if one is dealing with it through the muscles.

It is impossible to urge too strongly the importance, for development, of adolescent religion. Its true function is to provide that large map of existence which will save youth from the waste and discouragement of exploring a seemingly unknown country. Its scale, however, must be large enough to include all that the intellect may discover; its highest use is that of assisting in the kind of emotional exercise that is indispensable for the development of character. The period beyond adolescence is of little importance for the present purpose, but in large survey it seems clear that those lives contribute most of value which maintain in some way the attitude of worship. From this point of view it matters little toward what it is directed, whether toward the *Deus ex machina* of the old-time theologians, or toward a Spirit pervading and unifying

the complexity of Nature, or toward a life force shown in the sweeping progress of evolution, or toward Humanity itself with its progress toward an enlarging and more significant future.



## UNIFICATION : THE PHILOSOPHICAL PSYCHOSIS.

It seems best to describe the stages of intellectual development, beyond that of theological interest, in their fully typical forms under conditions of what is regarded as the maximum of opportunity, in the modern college or university. Approximation to this typical development may be of any degree, the chief limiting factor being the increasing necessity at this time of life to select and prepare for a future occupation. In these cases the practical trend of interest as in other cases domination by sports and games, keeps more purely intellectual problems in abeyance and absorbs the greater part of adolescent energy. Here, also, it must be remarked, the development of woman is widely different from that of man; indeed, much that has already been said concerning the period of storm and stress is applicable only to the one sex; with woman, intellectual matters as such have only a minor interest—any theological system is acceptable if it forms a framework for the organisation of emotional values, consequently, scepticism seldom reaches that degree of severity found normal among men. Much also of woman's energy is being directed to the occupation of the future, where again, the narrow limits of choice save her from many difficult problems and serve to make her course a continuous one. The present



problem is, then, that of describing the stages of development before being drawn into active professional preparation and under influences such as are met in colleges and universities.

The first pronounced phase is that of domination by the Hellenic conception of life. For a time the Greek holds the most prominent place in the youthful Pantheon and the time of Pericles is that "golden age" which is the hope and despair of humanity. It is a curious fact that the adolescent emerging from the storm and stress of religious scepticism should identify his ideals with the conception of life that gives so little scope for theology. The fact is, perhaps, its own explanation. After every period in history when some new region of the spirit has been explored to the neglect of others, when civilisation has felt its groundwork to be unstable and crumbling, it has invariably returned to the Greek for a new beginning. The Greek ideal has always been rejuvenating and liberalising.

The factor in Greek thought which makes the most telling appeal to the adolescent is its conception of man. To a nature full of conflicting elements and an equilibrium constantly disturbed by a sense of the eternities, nothing in the world seems so desirable as the simplicity and balance of the Greek. Here the individuality is able to rest on itself, and youth has for a time the idea of constructing a character possessed of the completeness and repose of a Greek temple. It cannot be contended that a view of life which aims at self-development, or even self-expression, is ultimately satisfactory, but for a time it serves a useful purpose. It is also clear that many of the teachers entrusted with the guidance of the youth during this

period have less regard for the good of their pupils than for the supposed interest of the subject. Considering the brevity of time available for preparation for life, it is probable that teachers of Greek would carry out their functions better if training in the language were completely disregarded.

From the period of Hellenic domination adolescent progress seems to be along divided but parallel paths, with chief interest either following continuously or alternating between the two. The majority of adolescents prefer for a time to follow the ways humanity has opened up for expressing its feeling values ; these lead to a set of humanistic studies concerned largely with history, literature and the arts. The points of entrance are, as a rule, those of closest contact between history and the Greek spirit, namely, the Renaissance and German Romanticism. As the adolescent feels himself gaining a slight mastery in the field of the humanities he passes into a set of characteristic phases ; his tastes and attitudes become very modern ; his hatred of Philistinism is unbounded ; he feels himself at the beginning of a new period in literary and artistic history ; the best taste is found in those productions most calculated to outrage the multitude ; wisdom can only be exhibited in the clever paradox ; art is for art's sake and has no relation to morals, and its value is proportioned to the degree in which it exhibits this disparity. The adolescent feels great pride in arraying himself with the decadents, whose works are for a time seldom out of his hands. He begins a small cult among his friends, who happen to be like-minded, and nights are spent in discussing the prophets of the new era.

The other path of interest usually followed under university conditions is that of philosophy. Many adolescents rush into it very early if their struggles with scepticism have been very severe—a life-boat seems to be coming which will pick them out of the sea and the assurance with which the professor of philosophy navigates his craft gives them boundless hope. When on board, however, they make the disconcerting discovery that the bark flies the black flag, and the captain's chief occupation is that of making his passengers walk the plank—it is supposed to be good for them.

Modern philosophy as usually taught deals with a succession of systems which seem to rest upon each other like the stories of a building; the whole structure being, of course, topped by the professor's own system. The result may or may not be the true temple of knowledge—that is a matter at issue in the quarterly journals—the point of importance is to decide whether or not the history of philosophy is useful for developing the adolescent. It would probably be most serviceable if it could be taught as a set of folk-products, like literature or law, but unfortunately it is treated as the evolution of a device for thinking away the world. The adolescent recognises his old enemy now passing under the name of philosophical doubt. In course of time, however, he becomes habituated to the situation, and even finds that the epistemological machine works under his own hand. In this way he arrives at the stage of system making.

The educational value of science hardly needs emphasising after the years of struggle through which Huxley brought it to recognition. In individual

development the full appreciation of its value comes, if ever, near the close of adolescence. It is doubtful if science, as usually taught, greatly assists development before this period of life. Truth for its own sake is a goal which must be approached through many stages, and until this time truth for life's sake has overshadowed other motives. With the passing of the system-making phase, the desire for exact and verifiable knowledge comes into the foreground. This does not imply that the scientific field can be entered at once, but rather that the science of the self-sustaining and specialist order is the final step in a long course of preparation. The great difficulty is that the scientific curriculum is arranged in terms of the old formula of simple to complex rather than in terms of the stages of growth. If regardful of these, it would frankly relate itself to the departments of experience out of which, historically, all of the sciences have grown. The first application of this principle would be the destruction of nearly all elementary science text-books. Ultimate efficiency in science obviously depends upon the amount of human interest and energy that are brought into it—for a child to have a few animals as pets will go further toward the making of a zoologist than the dissection in the laboratory of any number of types. One can hardly imagine the making of a Darwin by the standard Huxley and Martin method. It is surely possible to bring about during earlier years something of living contact with the natural environment without which no scientific treatment can have much meaning. Hopeful signs are apparent in the increasing importance given to geography and nature study, although these, like all other educa-



tional endeavours, dry up at the source when attention is directed away from the child and to the matter of instruction.

It must be admitted that studies of the humanistic order have brought most satisfaction and have best assisted development. Probably a curriculum devised to meet the requirements of later adolescence would consist essentially of "*Kulturgeschichte*," about which other materials would be organised. At the end of his development the modern adolescent is left with one great hiatus, that between his humanistic and his scientific outlook. Poetry and science have not yet been able to move along the same path—nature is still for each a different thing. In spite of the nineteenth century the difficulty of reconciliation is one that will require a further development in both art and science before the two can be harmonised.

## VII.

### PATHOLOGY AND HYGIENE.

IN spite of the advances of medical science man's relation to disease is still a matter for the future to clarify. Much is known of the causation, course and consequences of specific diseases and also of means for their cure or prevention, but in its biological aspects the question largely remains for investigation. What is the nature of immunity or liability and to what extent can these be organically affected by any possible process of selection? It is clear that man's struggle for existence is by no means finished and his survival is far from ensured. The struggle is no longer with the large and obvious forms of nature but with the hidden hosts of microscopical organisms that perpetually menace the stronghold of life. There are some medico-biologists who see in this fact the continued operation of natural selection which now as always places its premium on the qualities which will add to the organic equipment of the race. The toll in human life that is annually paid to tuberculosis has, perhaps, its compensation in the survival of those possessing a higher degree of immunity from this disease. The savage is apparently more liable to its consequences than civilised man. The extreme of this view would be a *laissez faire* attitude which would regard disease as a beneficent agency for the removal of the inferior. Against this position it may be said that there are other scales for measuring superiority than that of immunity from

disease. It is admitted that in many respects man's evolution has involved a necessary degeneration; his body may be compared to that of the hermit crab which finds its home in the shell of some other animal; he possesses only the rudiments of the natural weapons which his animal ancestors found indispensable. These sacrifices are the result of human intelligence and reason which have brought about an adaptation of the environment to man, rather than of man to the environment. It, therefore, seems easier to drain swamps and kill mosquitoes than to sacrifice innumerable generations in gaining immunity from malaria and yellow fever; to kill rats in order to eliminate the plague; to destroy alcohol in order to banish alcoholism.

The distinction between ill-health and disease must be remembered. It is not clear that there is any correlation between bad health and liability to disease, and even less seems to exist between ill-health and mortality. Many chronic invalids are among the longest lived, whereas the healthiest seem at times to succumb most readily to the inroads of disease. These considerations assist in understanding the results of statistics, which show for adolescence a high percentage of sickness correlated with a low percentage of mortality. It has already been made clear that the period is not merely one of growth, but of many growths; each part and organ of the body having its own proportion of increase and its own accelerations and retardations. In this perpetually varied disproportion in growth, each organ and system has its time of undue strain with consequent liability to disarrangement of function.

It will, therefore, be expected that the systems of circulation and digestion in their endeavour to meet this variety of stresses, with the addition of difficulties incident to their own development, will be peculiarly liable to disorder. The enormous growth in the large muscles of the body inciting the adolescent to activity of a violent kind, which tendency is augmented by the conditions of athleticism, throws upon the heart an amount of work which too frequently results in hypertrophy of that organ. Ignorance is here, as elsewhere, the greatest enemy, and none of the philosophies of exercise during adolescence or later life seem to appreciate what the heart can or cannot endure; with better appreciation the endeavour to compensate for a sedentary life by exertion during holidays would appear in a wholly new light. In the case of adolescents with an ambition for athletic prowess the most careful watch is required to guard against permanent injury to this organ, the proper functioning of which is essential to health and efficiency.

It is, however, in connection with the digestive system that the strain of growth is reflected in a host of disturbances—most of the minor ailments of adolescence have their seat in the alimentary canal. There are numerous psychological manifestations which are in part causal and in part consequential. The plain and regular diet with which children are thoroughly content, often becomes during adolescence distasteful and even disgusting; the appetite is capricious and shows a pronounced tendency towards unwholesome articles. It is the time of desire for highly spiced and seasoned food, for pickles and for sweets. As the community tolerates the plentiful supply of shops



for pandering to these inclinations, it is little wonder that digestive troubles, which would otherwise be transitory and unimportant, become deep-seated, so that far too large a proportion of adults are dyspeptic in some degree. This is the period, too, when habits of alcoholism are initiated and established, and when the craving for the similitude of manliness requires the assistance of tobacco. The adolescent desire for alcohol is most instructive, as it has its roots deep in the mental characteristics of the period. It has already been seen that youth spends its time between the heights and depths; what it craves most is an intensification of life, the feeling of expansion of the personality. This result is in some measure achieved by physiological stimulation; consequently alcohol, as well as tea, coffee, and other drugs, are utilised to aid this process; they have the additional advantage of being somewhat wicked, and the element of revolt incident to their use, contributes to the feeling of independence. It must be remembered that the adolescent conceives himself as different from the humdrum persons of whom his environment is full; he, at any rate, will accomplish his ends by inspiration in his moments of clear and exalted vision; he finds in alcohol something that assists him. This must not be interpreted as a defence of alcoholism—the indictment of it by modern medicine is complete and final; it is, moreover, clear that the seeming inspiration is not real, that the actual efficiency is in inverse proportion to the feeling of efficiency engendered by alcohol. What appears, however, from this analysis of causes is the need of adequate psychological stimulation. Alcoholism is the consequence of repressed ideals.

• The most serious disease to which adolescents show liability is tuberculosis. Statistics show that mortality reaches its highest percentage in the late twenties or early thirties, and, as the disease usually requires several years of incubation, it appears that infection takes place during the close of the period of growth. As liability to tuberculosis is known to be highly inheritable, and as most forms of hereditary weakness show themselves at this time, it is clear that unusual precautions are required during this critical epoch in all cases where warning is conveyed by family history.

Many of the organically based mental diseases depend upon hereditary weakness, and therefore fall within the scope of psychiatry; it needs only to be noticed that inherited tendencies to insanity, like the liability to tuberculosis, make their appearance during adolescence. It is never possible to foretell in the case of any child what latent and obscure factors bequeathed by its ancestry will assert themselves in this final composition of the life forces. Those cases which manifest themselves as organically insane may be regarded as hopeless from the standpoint of the parent or the teacher.

As regards nervous and mental disorders of a functional kind, discussion may be usefully restricted to two or three prominent types where measures of a protective or curative order may be presumed to have some effect.

✓ (a) It is to be noted that in the first place adolescence furnishes the last opportunity for the cure of automatisms, which are only slightly less prevalent during this period than during childhood. Adolescents manifest

over a hundred of these automatisms, of which the more obvious examples are such as stammering, trotting the leg, biting the nails, picking the face, flicking the fingers, expectorating, winking, and grimacing. These are all dissociated activities, and in the majority of cases involve the use of the smaller muscles; their existence indicates a lack of control and co-ordination in the hierarchy of activities. Under modern school conditions the action of the fundamental muscles is kept in abeyance for long periods of time, and observation shows that the majority of inco-ordinations appear in the schoolroom in response to the pressing need for movement. With more insight into the psychology of exercise it will be found that the principle of prevention is that of proceeding from fundamental to accessory in the formation of nervous co-ordinations instead of the reverse direction which is the one followed at present. With the rapid growth of early adolescence the muscular system and its neural counterpart undergo extensive rearrangement, giving the last opportunity for organisation in a hierarchy of control. This is the period when accessory movements occupy a minor place and the rapidly growing fundamental muscles demand actions of the large kind. As present school conditions, by continuing the endeavour to keep the finer movements of expression in the foreground, are neglectful of these clear dictates of nature, it is to be expected that adolescents will in the end be possessed of an abundance of small habits having the character of automatisms, which, although hidden or inhibited in the presence of others, have continuous exercise in private.

Another consequence of the same set of causes is the tendency to nervousness so very marked in mid-

adolescence ; as contributory to this, the quality and quantity of sleep must receive some attention. It has been ascertained that many children and adolescents habitually sleep from one to two hours less than is physiologically necessary. The best sleep comes in consequence of fatigue resulting from use of the fundamental muscles, whereas fatigue of the accessory muscles produces that overwrought nervous condition which is the great enemy of sleep at all times of life. The remedy for these difficulties is quite obvious. Their final stage after passing the borders of the normal is chorea.

(b) The study of hysteria, its causation, course and treatment has only of late become appreciated as one of the chapters of psychology possessed of exceptional significance. The investigation of its typical forms throws a flood of light upon normal mental life as it is a species of functional disorder, to which the path leads through numberless normal stages. In its extreme form hysteria manifests itself in a specific, not general, dissociation of mental content. A section of normal experience is broken from its connections and persists as a subconscious hyperæsthetic system ; consciousness closes over the gap, and the section is lost to memory. Whenever a suggestion of the appropriate kind is able to pass through the stream of consciousness and reach the subconscious formation, the latter reacts with explosive violence and during the attack takes complete possession of consciousness. Its power for mischief is not only shown in this way but in the fact that it may be permanently active, aggregating other materials to itself and preparing the way for a complete fissure in the personality.



The cause of hysteria is emotional experience of a violent character or continued repression, and this extreme emotional tone persists in the subconscious formation. The nature of hysteria indicates its method of treatment. In hypnosis it is possible to reconstitute the forgotten experience and gradually raise it into its proper connections in memory, where, like all remembered experiences, its accompanying emotional tone decreases in intensity and therefore ceases to be a disturbing factor. What has thus been described in its extreme manifestation is probably in lesser degree also true of a considerable part of mental life. Emotional violence during early life probably always leaves its trace. Most unreasoning fears, or prejudices, or moral principles may be classed as subconscious formations, which may be conveniently described as hysteroid. The value of human intercourse is to be found in the supply of suggestions by means of which men mutually explode their mental systems. Adolescence, with its abundance of new and strong emotions not yet supplied with regular channels of discharge, with its receptivity and corresponding sensitiveness to suggestion, with mental materials weakly organised and therefore liable to dissociation, supplies a prolific soil for the growth of subconscious systems whose future exercise may be useful or harmful. The great majority of hysterical women are rendered so by shock associated with the sexual life. All of these facts indicate the necessity of a *régime* so altered as to hold a balance between sensitivity and hardihood.

(c) Dementia præcox may be regarded as the opposite extreme to hysteria; it also depends upon a failure

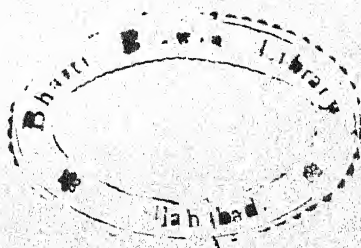
in adaptation of the emotional life. Typical cases may appear at any time during the adolescent period, but the majority of them occur toward the close. In its extreme form, the prognosis of which is very unfavourable, dementia præcox involves a complete severance of emotional from other forms of activity. It is interesting in that it demonstrates the dependence of health of both mind and body upon the emotions; if either is left without motivation the consequence is speedy decay. It is not clear that typical dementia præcox is an entirely functional disorder, but the weight of evidence appears to be on this side. Some authorities incline to the belief that all adolescents are in some degree afflicted with this malady; whether or not this be true, minor grades of the disease are easily discoverable. The symptoms are a persistent lack of interest, a perpetual listlessness—which must not be confused with relaxation after violent exercise—and an equal dislike of physical and of intellectual activity. The first stage is that of more or less fatuous day-dreaming followed by the tendency to sit for prolonged periods apparently in deep thought, but really with an empty mind. The subject inclines to cultivate the “deep thought” interpretation of his condition, and when disturbed assumes a blasé and cynical attitude. The cure for this unfortunate condition is the same as for most adolescent ills—a healthy day's work, the application of energy to real things and the achievement of results.

A discussion of mental morbidity during adolescence would not be complete without some reference, however slight, to certain fear psychoses which for many make life a nightmare during several years. They are

associated with solitary vices which investigators agree have an all but universal prevalence among boys. Adults seem to think that they can solve this problem by indicating certain dire consequences which presumably result from the practices. Many an adolescent lives in terror of what he thinks is surely impending—insanity. The community in cynical, and even criminal, negligence, allows the press to be used by a host of quacks for the purpose of exploiting these fears in their own interest. One or two simple statements may clarify the atmosphere of this admittedly difficult problem. In the first place the harmful consequences have been enormously exaggerated and are in no case so calamitous as the morbid fear so commonly associated with them. Again, the relation of vice to insanity has never been established as causal, but is frequently consequential and symptomatic; further, it is a matter in regard to which it is important to distinguish kinds and degrees. These considerations do not, however, mitigate the harmful consequences to the higher forms of idealism consequent upon an unnatural mode of short-circuiting the instinct. As to treatment, it may be pertinent to suggest that good results will come from closer adherence to the facts and somewhat less of the high pulpit method usually practised; for the rest, confidence must be placed in hygiene and in Nature's kindly periodicity.

The method of living suitable for adolescence provides a case where the dictates of common-sense and experience are reiterated by science. The controlling principle is that considerations of health and growth are paramount over all others. If it is the prime function of the body to project the soul on its lonely way, then clearly this cannot be done by any accessory machinery

which sacrifices the body's efficiency. It is hardly necessary to restate the simple rules as to an abundance of varied but wholesome food ; as to fresh air, cleanliness, proper bedding ; the quality and quantity of sleep ; and, above all, the healthy day's work, if possible, in close contact with the soil.





## VIII.

### JUVENILE CRIME AND ITS TREATMENT.

THE statistics of crime give evidence that the proportion of juvenile offenders to the whole population has enormously increased in the last two or three decades, and its present rate of growth is so high as to constitute one of the most urgent problems of the times. It was thought a generation ago that the civilising influences attendant upon the new movement toward popular education would be effective in diminishing juvenile crime, but the reverse has proved the case, for popular education does not necessitate or imply civilising influences. The only difference discoverable is in the method of the criminal—the predominance of the old straightforward crimes giving way before more skilful and educated if less admirable methods. A fact of importance is that the criminal career has its beginning in adolescence. Hence, if the problem of the juvenile offender could be met by effective methods, crime of the habitual kind might be greatly reduced if not eliminated, and the community would suffer only from such occasional anti-social outbursts as may possibly occur with any of its members under stress of circumstances. It will, therefore, be useful to inquire what factors in adolescence predispose to the criminal life, and what results existing or proposed methods of reform may be expected to effect.

No definition of crime can be expected to satisfy those who render discussion useless by an habitual search for labels and pigeon-holes—it is sufficient for the present purpose to say that the line dividing criminal from non-criminal conduct is that beyond which the community as a whole agrees that no one of its members may go. What may be criminal in one community may therefore be tolerated or even normal in another, and this rule would apply to degrees of seriousness. Thus, at one time and place it may be a light matter to kill a man and the most serious thing in the world to steal a horse; equally under other conditions the most serious offence may be disrespect shown to a mother-in-law. The specific act, then, is entirely secondary to what the community has agreed is necessary for its own integrity. Crime may, therefore, be largely conventional and it approaches definiteness in proportion as it involves the necessary conditions of all community life.

There are two main classes of criminals, each of which permits of subdivision. The first includes all those whose native qualities render them anti-social; a certain proportion of these, as yet undetermined, may be grouped as degenerates, while the others by reason of too great hereditary preponderance of one or another set of characteristics are unable to form that hierarchy of inhibitions which renders them law-abiding members of the community. The other large class includes all those who are rendered criminal by circumstances, with subdivision into those who through lack of opportunity are deficient in social purpose and those who are normal in all respects but have been subjected on some occasion to great stress. The last-mentioned group forms a division by itself, and lies outside the present discussion.

For all the other groups the period of adolescence is critical.

The prime condition of adolescent outbreaks of an anti-social or criminal kind is to be found in the general psychological situation already described. It is a time when new emotions and impulses bring about an upheaval and re-formation of the whole moral situation. Years of discipline are required before the newly made character possesses sufficient stability to keep it from being overturned in any one of many directions. The element of normal control is to be found in the ideal which the adolescent has placed before himself; his great problem and source of perpetual suffering is the chasm between what he is and what he desires to be. Any weakness of ideal involves a surrender to the strong and now ungoverned hereditary forces. Most cases of criminality are cases of arrest and reversion to the moral life of childhood where control has to be exerted from the outside.

✓ The normal adolescent under good conditions feels an enthusiasm for social purposes which brings his own purpose into line; but even with him the process is a long and painful one. It is complicated by a perpetual inclination to rebel against established order, a dislike of restriction and a corresponding desire for freedom. Any normal law-abiding man who remembers his own adolescence can doubtless recall numerous instances when he was perilously near the limits of the law. The period is, then, one in which old moorings have been cast off and new ones have not yet been found; when the normal lack of adjustment can easily be made serious and permanent by any predisposing cause either on the side of his own nature or on that of his environment.

As has been seen in a previous connection, degenerate tendencies of all kinds assert themselves during these years, and normal characteristics through a miscarriage of environmental influences may fail in balance and proportion; almost any normal tendency, if present in exaggerated degree, may predispose to crime. These are known as the faults of children and adolescents. It would seem from the practice of many parents and teachers, who engage in a perpetual pruning, that children possess nothing but faults; the names of these are very numerous, while the names of virtues are hard to seek and usually describe approximations to self-sufficient adulthood. Among these many faults certain ones are especially prominent, and are worth consideration as contributory to criminal tendencies. The first place is easily taken by lying, a fault which may be distributed into many varieties. The lie of early childhood is due to the exercise of the imagination and the consequent confusion of fancy with reality; this may be considered creditable rather than the opposite. There appears somewhat later the dramatic lie due to a desire to produce a striking effect; this, again, is not very serious as misrepresentation of the story-telling order can easily be shaken free from the intention to deceive. Another type of lie characteristic of children is that used as a means of avoiding punishment; this is usually regarded as the most serious of all, but it is doubtful if any moral quality can be attached to it. The ethical basis of truthfulness has no existence in childhood, and the cherry-tree story of Washington, if true, would be an anomaly. The habits of children are established on the intelligent or practical basis—those lines of action are adopted which experience finds



successful; the habit of lying is no exception to this rule and implies no more. It usually exists in cases where authority of exceptional severity is exercised, and it is well known that additional punishment for the lie itself has but little effect. The fault is, then, not altogether on the part of the child, and should not be regarded as a symptom of permanent depravity; the melting-pot of adolescence has many curative ingredients. With the first appearance of the moral sense juveniles may go to the other extreme and exhibit an exaggerated punctiliousness, qualifying all they say, and frequently repeating to themselves, after making statements, some formula by which they assure its conformity with their own ethical standards. If, after this, adolescents become habitual liars, the case is very serious, and the lie will be found to be of a specific kind—it is the hypocritical lie used to cloak themselves and is the real beginning of the criminal career, whether or not of an overt kind. The reason for this is sufficiently clear; the basis of community life is the ability of the group to focus its influence upon each individual and thus secure conformity to its own ends. Those ends are, for the normal adolescent, objects of supreme regard. If, therefore, the youth creates a system of appearances which lead others to assume his conformity and co-operation, while behind the cloak his conduct observes other ends, it is obvious that he renders himself inaccessible to group influence and judgment. This statement does not imply that he is to shout his vices from the house-tops, but it is intended to bring out that cynical disregard for social responsibility with which the hypocritical lie is always associated.

• The case of anger may be regarded as typical of normal tendencies rooted in heredity upon which membership in a society enforces subordination; if uncontrolled, it predisposes to crimes of violence under provocation. As regards its treatment, it may be observed that nothing is more useful than the Aristotelian catharsis as found in the usual boys' fights. The modern world is perhaps somewhat over civilised in its endeavour to prevent the healthy locking of horns of young males—the few bruises received are a small price to pay for the moral benefits involved—and the boys themselves nearly always ensure fairness and prevent resort to violent methods.

Other adolescent faults are envy, which may lead to malicious damaging, and jealousy, which is a frequent cause of serious crimes often committed in complete blindness to consequences. A morbid idea of personal honour joined to adolescent sensitiveness keeps the eyes always open to the semblance of insult and incites to revenge of various degrees of seriousness.

In the case of cruelty a distinction must be drawn between that form found in childhood, which is usually ascribed to thoughtlessness or curiosity, and that form which persists in adolescence. As this is the golden period of sympathy, it is probable that a pronounced degree of cruelty is due to hereditary defect; it is, as a matter of fact, often found associated with abnormal sexual tendencies. No curative measures have any effect, and all that may be done is to protect others through the restraint provided by fear of consequences—extreme cases should, of course, be secluded.

Faults like pyromania depend upon psychoses of development in which normal tendencies are exaggerated.

A group of facts far too little considered regarding the social relations of criminals throws much light upon the genesis of the juvenile offender. Criminals, at any rate those who are free from hereditary taint, are like other people unable to live apart from their fellows—a complete Ishmaelite is an impossibility. This minor grouping serves to consolidate and establish un-social or anti-social tendencies. Women of the so-called "outcast" kind are by no means outcast. They have a complete social order among themselves and forego contact with the more moral groups of the community. In like manner, pornography thrives by the mutual contact of similar personalities, and, equally for the criminal there is a grouping, subterranean it may be, but necessary for the support of each individual. These considerations make it necessary to look for the corresponding institution in the case of juvenile offenders, and it is unquestionably to be found in the so-called hooligan gang. Isolated individuals may be guilty of occasional offences, but the criminal career is begun in a group of this kind; the boys' gang is quite normal and depends upon the application of the dawning social sense to quite natural but primitive interests which are not allowed scope in well-regulated, and therefore dull, civilised society. It will be seen, therefore, that the pernicious element is to be found not in the kind but in the degree. Studies made of boys' gangs in the great cities show that provision is made for all the requirements of a social group, such as a place of meeting equipped with congenial

literature, a primitive kind of leadership, secret call signals and hostile encounters with other groups. In the depredations of these gangs, there is usually a specialisation of function, and the element of adventure clearly outweighs all others; another important fact, which gives evidence of the self-sufficiency of these organisations, is that they are not amenable to the usual penal methods. If one of the members happens to be caught, he is, at the completion of his sentence, given the dignity of a hero; so that it becomes the ambition of the hooligan to do "time," knowing that this will add to his prestige in his neighbourhood. The saving facts about boys' gangs are that they are highly amenable to guidance and their energy can easily be directed into useful channels; as matters stand, however, they constitute the training field of the criminal population.

If the foregoing considerations have any weight, it must be conceded that ultimate responsibility for criminal conduct rests rather with the community than with the individual concerned. If criminals are made, either by heredity or by defective educational influence, their conduct does not rest upon any free act of choice. As regards the first group, the community is responsible for having allowed them to be born; sufficient is now known of human biology to detect hereditary strains, and the proposals of eugenics command approval—such unfortunate individuals ought to be as well cared for as lunatics, but ought to be denied the privilege of propagating their kind. The community is equally responsible as regards the second group for the efficacy of educational means, whereas it contents itself with according punishment to the criminal.



The problems of penology are so confused with traditional matters, moral, legal and other, that their scientific treatment is probably the concern of the distant future.

The conception of justice so long an object of reverence resolves itself into a set of conventions accepted by the group which vary with time and place and are rooted in what are called "principles," known to the psychologist as "habits of thought." The term can imply no more, in the light of present knowledge, than a fair investigation of the facts to ascertain guilt or the opposite. Both the crime and its punishment are matters of community judgment and action in which little can be regarded as fixed. In consequence of this the determining factor is tradition or precedent, and penal tradition has from the earliest times carried the element of revenge, from primitive compensation in kind—an eye for an eye and a tooth for a tooth—modified into the *wergild* or compensation in money, on to the modern system of fines; such is the curious spectacle of human justice. The community still feels it necessary to avenge itself on the criminal by placing him under conditions of hardship and disgrace. Now it is to be presumed that the interest of society is either that of protecting itself or of making the criminal into a law-abiding citizen. It has been thought that punishment carrying the element of expiation subserves the first of these interests by inducing wholesome fear; nevertheless, it does not appear from the facts that there is any relation between the amount of crime and the severity of punishment.

In the case of the habitual criminal whose character is firmly and finally established on anti-social lines the

self-protecting interest of the community demands prolonged or permanent deprivation of liberty. The policy of repeated short sentences derives from the obsolete principle of quantitative expiation, and the present devices for inflicting prison hardships can only be regarded as remains from the barbarous, or at least pre-scientific, period of human evolution.

The same simplicity and directness of method advisable in the treatment of those hereditarily and habitually devoted to crime find their place in dealing with those with whom there is a measure of hope; these are juveniles of normal heredity who are predisposed to criminal conduct by bad environment. On one point the modern community is at last thoroughly agreed, and that is, that the young must be kept separate from habitual criminals. This principle leads directly to consequences in the way of special treatment. Probation methods have in other countries proved enormously beneficial; in England, unfortunately, the lately enacted provision is rapidly becoming a dead letter because its application has been left largely in the hands of wholly legal, and therefore antiquated, magistrates. In reformatory methods also light is dawning but slowly, the one great example in this field is Elmira, although it is frequently said by competent people who base their opinions on hearsay that Elmira has proved unsuccessful. Much hope is entertained in this country with respect to the Borstal system. The opinion of the educationist must be that it is excellent as far as it goes, but that at present it has little opportunity because of niggardly provision; after the removal of this difficulty it will be needful to place it on a far broader educational basis than its present examples manifest. No institution operating on narrow

lines can safeguard against the stresses of the outside environment ; obviously, provision must be made for gaining a livelihood, but the teaching of a trade is valuable in these cases chiefly through secondary consequences—the growth of regular habits and responsibilities. Criminals are made far more frequently by love of adventure than by love of gain ; it is, therefore, to the formation of character that chief attention must be given.

If it is urged that the community makes adequate provision by its educational system, it need only be replied that the present increasing proportion of juvenile offences is a standing condemnation of its inefficiency. Existing educational devices are ostensibly for the purpose of training the intellect, while character is not even thought to be within their field of operations ; it cannot be claimed that the semi-militaristic habits of the school have any bearing beyond their immediate purpose. The school is even open to the accusation of giving assistance to the making of criminals through sheer boredom imposed upon adolescents. So long as no provision is made for the exercise of interest, little can be expected ; the best results would come from fusion of the activities of the school with those tendencies which, uncontrolled, express themselves in the hooligan gang.

## IX.

### EDUCATION OF BOYS DURING ADOLESCENCE.

A THOROUGH consideration of the present subject would require an excursion into the general theory of education, particularly as modified by increased knowledge of child nature. This, however, is impossible, and the present discussion of adolescent education must assume that the point of view of modern pedagogy is familiar, and limit itself to the specific features falling within the age limits of adolescence. Secondary education must, so to speak, be put on its trial, and justify its claim to be a regimen suitable for adolescent needs. It is difficult to secure sufficient detachment for this purpose, since anything in the social order possessing a tradition and a machinery of administration is for the majority a fetic, from which the imagination is unable to escape. It will be useful, therefore, to notice both the history and the machinery of secondary education.

The problem of the education of youth is especially a modern one ; this is partly because the social heritage has grown so enormously complex that it is difficult to know what parts should be taught to the exclusion of others. The necessity for specialisation makes more urgent than ever the discovery of those generic factors in human culture from which the specialisms branch. The one certainty is that these factors are not being utilised. For the past, the test of an educational means was its importance in assisting towards preparation



for life. The savage child grows as naturally as one of the lower animals, gaining through imitative plays a mastery of the functions needed by the savage adult—skill in the use of arms, knowledge of woodcraft, and the habits of animals; at the dawn of adolescence he is initiated into the intellectual and spiritual heritage of his group, the mysteries of religion and magic being imparted to him by a few days' instruction. This illustration is given because it exhibits the method of natural education tested by the degree in which it prepares for life; and, again, because with most primitive peoples now known the social heritage is a sacred mystery foreshadowing those of more civilised times and indicating the universal character of adolescent modes of reaction.

With the Greeks, again, the test of education was the utilitarian—this word being taken in its large sense. Of supreme importance in the Greek mind were the arts of citizenship, with which was closely associated a tradition compactly organised and comprising a philosophy, a religion, a system of morals, a poetry and a history. The educational task of any people is simple so long as the essence of tradition is contained in a set of sacred books. The mastery of these constitutes a much less formidable task than that furnished by the British Museum. The same description applies to the training of the mediæval knight and also to the preparation for trade found in the old apprenticeship system.

It is pertinent, therefore, to inquire whether modern secondary education meets the test of preparation for life by providing material suited to the interests and powers of adolescence. The circumstance that chiefly hampers such an inquiry is that it concerns an existing

system, which is equivalent to saying that it is something entrenched and fully supported by those members of the public who are accustomed to receive their ideas ready made. Viewed in historical perspective, the university is seen to be a product of the Middle Ages, tracing direct lineage from the cloister, though stimulated into independent existence by Moslem influences, and with a curriculum organised about theology. This applies, of course, only to the arts department, which, however, still has precedence in all institutions that claim the status of a university. The arts curriculum is, therefore, one which prepares for the life of a clergyman, or would do so if the latter were still believed to be the monopolist in mysteries. The first historical addition to the university equipment, after philosophy and letters had been freed from scholastic bondage, was the general teaching of mathematics, astronomy and mechanics. The development of these sciences happened to coincide with a period of philosophical history when it was believed that ideas were either inborn and only needed inflation, or were non-existent at the beginning of life and had to be acquired through appropriate exercises. Nothing could be better suited for the purpose than the exact and final ideas of extension afforded by mathematics.

These are the two lines of educational tradition; to them have been added various branches of technology known as sciences which are not yet free from utilitarian suspicions. With the multiplication of industrial and technical schools, the confessed object of which is preparation for gaining a livelihood, it is becoming impossible for the universities to teach the sciences on a basis conceived to be wholly educational.

No discussion of the university and secondary school curriculum can be considered adequate unless it faces squarely the problem of the place of classics, but in this department criticism meets with peculiar difficulties. There are always certain subjects, usages and institutions which are hidden from close inspection by a cloak of sentiment and shielded from criticism by a hedge of cant phrases. Among these, classical subjects have held a place until recently, and still hold it in the estimation of a decreasing number of people. The consequence has been the impossibility of obtaining for the matter a hearing on its own merits. This same sentiment, the historical causes of which it is not necessary here to discuss, has given the classical languages their place of prestige in the curriculum. Knowledge of them has been, and still is, taken as an accomplishment of the leisured classes, and this status has given them an undue prominence as objects of aspiration for other members of the community. Booker Washington tells how the emancipated negroes desired beyond everything else a knowledge of Latin. This conventional and social position has been reinforced by the use of certain catchwords like "cultivated man," "classical scholarship," and all the rest. But it is now possible to put aside these naïve prejudices and examine the whole matter in an approximately scientific spirit. If the university course is left out of account and attention is given to the teaching of classics in secondary schools, the plea universally made in its favour is that of its training value. This is, however, merely to uncover it to one of the strongest batteries of modern pedagogy, that which is rapidly reducing the fortifications of the old school system based upon formal training. The one solid result

at which investigation has arrived is that the child's mind grows in terms of itself and of the educational matter provided for it, and not in terms of disciplinary exercises. Moreover, there is no evidence that ability or skill obtained in one department can be transferred to another. The idea that the classics can train one for the Civil Service has nothing to support it beyond acceptance. Again, if training is the thing aimed at, there are many languages far more efficient than Greek or Latin, for example, Ojibway.

✓ The justification for including any subject in the secondary curriculum is to be measured by the degree in which it meets the requirements of adolescence, while at the same time aiding that adaptation to the conditions of life which the adult will need. On this basis the classics have something to be said in their favour, since Hellenic enthusiasms are distinctly adolescent phenomena. They, however, appear very much later during the university period, and are concerned not with language, but with literature and art.

At the present time the period of discrimination with regard to classic literature and art appears to be just beginning. No one is inclined to dispute the excellences of classical literature, but few as yet dare to say that they have discovered between these excellences many dreary wastes. This same is true of classical art; the callow enthusiasm of the adolescent will tolerate no criticism, but the experienced adult often grows bored by classical sculptures, their imitations and reproductions, square rods of which differ only in ringing the changes on artificial poses.

It is not to be supposed from the above that the alternative to classics is the arid type of science which



obtains in many secondary schools and merits condemnation even to a greater degree, inasmuch as it reduces the life of Nature that it professes to describe to dead bones and barren formulæ. With such dry nourishment mental growth is no more possible than in the other case.

If education is conceived as a process of passing on the accumulated resources of the race, its perpetual problem is that of selecting what is most worth while. This was simple enough when a collection of sacred writings covered the whole, but is, under modern conditions, most complicated and difficult. Nothing should be admitted to the curriculum until it is proved to be worth while, because there is all too much to learn and all too little time in which to learn it. The accusation to be made against the classics is that they involve a misapplication of time and energy during the most important years of growth, and this sacrifice is made to meet a conventional demand which is educationally irrelevant. The classics should have their place like other dead languages and literatures in the list of university specialisms. The time has surely arrived for secondary education to free itself from the load let down from above, in spite of what it may lose in the way of endowment. After all, the conditions on which scholarships are awarded are open to amendment. Even if the parent is unable to do so, the teacher should realise that his responsibility is to the child and not to any conventional system or set of ideas, and that his work is to be estimated finally in terms of the human product and not in terms of place on examination lists.

The secondary school may be regarded as a product of the university; its affiliations are upward rather

than downward toward the primary grades ; its teachers, to be considered fully qualified, have to be university graduates with some knowledge of the subjects they teach, coupled with moderate ignorance of the principles of education. It seems to be the curse of education that each stage is made to support as much as possible of the weight of the one above it. Each demands that the children should come to it with preparation of a specific kind, with no regard to the needs of the children themselves. Teachers, like other human beings, try to place their work on the shoulders of someone else. The criminal ignorance that requires the kindergarten to teach reading is a case in point. Correspondingly, the secondary school is treated as an anteroom to the university ; its curriculum is devised for the purpose of passing university entrance requirements, and the height of its ambition is the taking of university scholarships. The boards displaying the names of scholarship winners are pointed out with towering pride. A more enlightened generation will regard them as a record of offences demanding condemnation. Parents are blinded to the sacrifice involved by the ridiculous glamour about these achievements and also by their own cupidity. It is well known that only a small fraction of secondary scholars ever go on to the university, yet the treatment of all is dictated by the interest of these few. The time occupied is undoubtedly the most precious of the whole lifetime for the growth of mind and character, yet it is thrown away in grind on materials of third-rate value—this for a stupid and scientifically obsolete tradition. Such statements will probably be resented by many parents and schoolmasters ; the latter have a vested interest and the former are foolish if desire for the good

of their children does not lead them to ascertain the facts.

The first step, then, towards an improvement of conditions, and the one most necessary, is to recognise the fact that no school can claim from the one below it any more preparation than is provided by meeting the requirements of that stage of growth. It is important to remember that the object of education is human quality and human adjustment, and that these are lost to view so long as progress is measured in terms of subjects. It being known that the stages of development are differentiated by new instincts, emotional adjustments, interests and tendencies, the school must be regarded as an environment suitable for the right utilisation of these toward the final constitution of character and its value must be estimated by the degree in which it meets this requirement. If these considerations are true, then secondary education, beginning presumably with the dawn of adolescence, should have its own subjects, materials and modes of instruction suitable to the characteristics of the period of development, and having no necessary relation to the preparation of preceding years.

✓ It has already been indicated that the period just preceding adolescence is, by reason of its stability of adjustment, more suitable than any other stage for methods of a drill character, that is to say, the usual methods of the schoolmaster result in less harm between nine and twelve than at other times; but with the beginning of adolescence drill methods become wholly unsuitable, they result in little benefit, and only engender boredom and dislike of the subject. Regard must now be given to new growths of all kinds which appear

at first as tender buds, certain to be damaged by the mechanical methods previously successful. A stage nearer the racial type, and uniform in its characteristics, gives place to one whose dominant factor is the formation of an individuality, and therefore demanding respect for variability, and consideration even for peculiarity. The *régime*, therefore, which crushes unlimited variety and powers beneath a ruthless public school tradition in the interest of producing as many specimens as possible of an amiable but mediocre type merits nothing but condemnation.

The most difficult lesson to learn as regards adolescent education—as, indeed, in all other departments—is that of knowing when to refrain from interference. The most significant stages are those which youth must pass through for themselves, and mostly alone, and which cannot be touched except harmfully by formal school methods; fortunately, the educative process proceeds on its own account in terms of the spontaneous new interests, together with an eager desire for knowledge. This is the time of the reading passion and an ambition to master all knowledge. At no other time of life is the content so important and the form relatively so negligible. Youth requires large issues and values, great wholes of knowledge with never too great prominence of small details, in line and consonance with its newly born idealism. Microscopical and analytical methods are useful later on at the time of examination and criticism; they should certainly for all the early years of adolescence be held in abeyance. The most useful educational material is humanistic and biographical; the introduction to science for which preparation should have been made by handwork is now



easy to achieve through knowledge and admiration of the heroes of science. As surrounding and including all special measures must be a simple *régime* of life in close contact with Nature. Health and activity must be taken as the keynotes, and no conventionally approved achievement can compensate for their diminution or loss.

## X.

### EDUCATION OF GIRLS DURING ADOLESCENCE.

THE problem of the education of girls is complicated and difficult, and all that can be attempted is a preliminary triangulation of the field. The difficulty arises partly from inadequate knowledge of the feminine nature, and partly from the fact that the modern community is uncertain as to what it wishes to make of its women. In periods preceding the present, the sphere of woman was circumscribed, and this limitation of activity supplied a guiding thread for her education; training for the duties of the home, useful and ornamental, was accepted as supplying the principle of first importance. The participation of woman in the economic world has been contested theoretically and practically; many have gone so far as to discredit woman's inventive and productive ability. Whether or not intervening evolution has served to incapacitate her in these respects, this disparagement of her powers fails at least for the early history of the race. The first stages of human culture, which are perhaps the essential ones, must be placed to her credit; the preparation of clothing and food, the domestication of plants and animals appear to have been her achievement, nor does it appear that at present she is lacking in productive capacity—wherever the opportunity has been given and the effort made, she has been uniformly successful. It should be remembered

that all the essential factors in the work of the world are to be found in the household, and each department of the former may be regarded as only an extension and specialisation of the latter. If this is so, the community fails to utilise its most valuable asset in the world of affairs. The point at which France has arrived in this respect is well known. Business in woman's hands is more orderly and more regardful of gradual results than in the hands of man. A reversal of the present order would involve the abolition of the Stock Exchange, in so far as it is used as a device for gambling, and of all other instrumentalities by which man, true to his nature, endeavours to get much out of little. There is also much ground for considering the State as an enlarged household, and if the principles on which they proceed are identical, it may be that the exclusion of woman from the sphere of statesmanship is little more than blindness. This universal adaptability and capacity, however, render difficult the provision of appropriate means of education ; there seems to be at present no way of knowing at what they should aim.

There are one or two general considerations relative to the function of woman in the social order which may be useful as a background for the present enquiry. It is first of all, far from evident that woman has no place in the economic circle ; indeed, it is quite obvious that she occupies the larger half. If the old-time economic distinction of production and distribution may be utilised, it is clear that woman is the great distributing agent ; in the last analysis it rests with her in what ways the material resources of the community shall be expended. Poor and rich alike exert themselves for the purpose of providing their women

with means ; the household is an institution whose demands are only limited by the possible supply.

✓ The other great function of woman in social life is that of a "spiritual power," as was indicated with sufficient clearness by Comte ; upon her depends the level to which the social order attains in its progress towards civilisation. This does not imply that the striking figures in the forefront of history have been women ; the spokesman of a movement is nearly always a man, but it is a woman who supplies him with a platform from which to speak. Classical French literature is to be ascribed not wholly to the men who produced it, but also to the women who by providing a social environment of ideas and stimulus called this greatness into exercise. Again, things intellectual and artistic are like other matters, in that they are sought in proportion to the social estimate placed upon their representatives, and status is always fixed by women. Achievement in these directions consequently depends upon the simple principle that man does what woman requires of him.

When these two considerations are brought into conjunction, it becomes clear that woman's social function is that of utilising the material resources of the community in the interest of human advancement. Applying this scale of responsibility it must be admitted that the measure of modern woman is not altogether creditable. A group of women gathered before a Regent Street window supplies a picture of the present state of civilisation and a portent for the future ; so long as the women of the community apply its resources to purposes of mere display, no effort will be availing against this barrier of their degradation. The only



remedy will probably be a new order of education for girls which remains to be discovered.

The conception of woman as doll is believed by many deluded men to be the highest expression of chivalric idealisation ; its cause is probably to be found in the fact that man is the agent of selection on account of his superior economic position. Clearly, if woman considers it her chief business in life to be selected by man, most of her energies will be applied to bringing about this happy event ; her education will have in view only one result—her wedding day—and will naturally be directed to the improvement of those features which go under the names of charms and accomplishments. The "Young Ladies' School" is still to be found in many parts of the Western world ; its curriculum is quite trivial, its sole object being that of embellishment. It is, therefore, to be expected that women who find display their function before adulthood are little likely to change later on.

It may be objected to the foregoing that it describes a rapidly obsolescent type of girls' education, that existing provisions are of a far more serious kind, and that in the future the material of education will be the same for girls as for boys. This new movement in woman's education is less than a generation old and is contemporaneous with the general endeavour on the part of woman to free herself from her old absurdly limited sphere. She has naturally followed the line of least resistance which is the way established by man and for man. Out of this has come the so-called competition of woman in man's pursuits, but as her education, modelled on that of man, prepares for nothing else, in so far as it prepares for anything, the result

is no more than to be expected. The educational question constitutes, then, the turning point of the whole problem, and the existing situation is quite clear. The newer schools and colleges for girls are duplicates of those for boys—the same curriculum and methods of instruction are in force and the same examination comes at the end. The question must be frankly faced as to whether all this machinery subserves any useful function, and whether it may not, on the other hand, do violence to the most important of all factors—woman's health and her own feminine nature. She, herself, is not at present entirely qualified to pass judgment as conditions impose upon her vision a distortion of features. Three decades ago, she was astonished to find that she had such a thing as intellect; since then she has endeavoured to ascertain if this intellect is of the same quality as that of man by subjecting it to the same order of tests. The consequence has been the erection of a means into an end. The question must now be faced as to what it all involves for subsequent life.

There are two general classes of women—those who are wives and mothers and those who are not. Whatever the future may contain in the way of further evolution, it is obvious that under present conditions the distinction is one of profound significance both for woman's psychology and for her social function. That the masculine type of education does not have the functions of the home as its objective is well demonstrated by studies of the graduates of American women's colleges, which show that an appallingly small proportion marry, and that only a small proportion of these have children. If the consequences do not

include racial suicide, they at any rate involve the elimination of the best stocks in the nation.

It may be useful to inquire if this opposition between the home and the world, in their claims on the services of women, is as fixed as many seem to believe them. If the home is viewed in its limited and exclusive sense, as a place for the exercise of rudimentary family functions, it must be admitted that its educational possibilities are unworthy of woman's nature ; but if, on the other hand, it is seen in its true social light as the point of departure and of focus for all the activities of the community, it may indicate an educational principle which, pending further development, can give exercise to woman's intellect and meet the largest needs of her nature. This must not be understood as an argument for the reactionaries, who use the words " home " and " motherhood " as if they had some magical significance, failing to remember that a home may be the most cramping of places and motherhood the most selfish of functions. It is the generic function of the home, of which nearly all community functions are specialised expressions, that may make it useful as an educational aim. From its activities nearly all the sciences derive ; its structure and decoration furnish a motive to the fine arts, and, as has been indicated, the world of affairs is only the home's economy in larger edition.

In spite of the wide scope of suggestiveness for education afforded by the principle of preparation for home duties, it cannot be contended that provision of this kind will meet the needs of all women. There is still to be considered the large category of spinsters, some of whom occupy this position from choice, while others are forced into it by circumstances. Within

the group is found a considerable diversity. Some women approximate to the masculine rather than the feminine norm of intellectual and practical interests; for these obviously the type of education provided for boys is more nearly adequate. A second group of "old maids" may be described as belonging to the unselfish type. Some of these are among the best spirits of the community; their production is the result of healthy development, independent of the facts of marriage and motherhood. It is a mistake to suppose that good, and even the best, results cannot be obtained for the race apart from actual motherhood; there is such a thing as vicarious motherhood, which may be greater than the reality frequently becomes. Without the lives of service afforded by "old maids" of this type the community would be poverty stricken in all its educational and civilising activities. It is not clear, however, that the development of such women would be deficient if proceeding on the lines of the prospective home-keeper, since, as has been indicated, this development is of a generic kind, which may specialise at any point and in any direction that the dominant tendency of interest may prescribe.

Another type of "old maid" provides a more unfortunate case, which, on account of numerical importance, furnishes the community with one of its most serious burdens. It is unnecessary to trace in detail the process of degeneration, of increasing selfishness which issues in morbidity, of ingrown instincts and trivial sentiments; the central fact is that a woman of this type has no purpose in life, no avenue for the healthy exercise and expression of her nature. She is significant for the present discussion because she is



produced by the kind of education which aims solely at the wedding day. As the happy event fails for some reason to eventuate, she finds herself without a place in life, and in her further progress becomes a parody of womanhood, regarded with pity tempered by ridicule ; with affections only large enough for little animals and other trifles ; with hypochondriac health, which matures her first for the doctor and then for the surgeon. These cases are a solemn warning against those trivialities which have for so long been covered by the term "woman's education."

A question that affects quite vitally both the material and the method of girls' education is that of so-called "co-education." It is still a matter of controversy, and, like all other questions in this unfortunate position, is subject to distortion by supporters and opponents alike. On the one hand, the partisans of mixed schools are "whole hoppers" regarding co-education, and would keep boys and girls together and under the same *régime* through all stages of growth. On the other side, it is claimed that co-education has proved itself a failure, the claim being supported by the views of some American schoolmasters. Regarding the latter, it may be said that many important principles have been found of value after being counted failures by many experimenters ; the same may be true of co-education, and hence a judgment of that sweeping kind may be regarded as insignificant in any endeavour to discover the facts of the case. To the supporters also it may be said that educational policy, like everything else, is too complex to fit any thorough-going formula. There are two clearly distinguishable aspects of the matter. The first is concerned merely with the fact that boys and girls

are kept in each other's company during the school period; the second relates to the fact that they are subjected to the same *régime* of instruction. Nearly all the discussions regarding the advantages and disadvantages deal with the former of these aspects—the supposed consequences to character, especially of boys being educated in the company of girls. Investigators have, in this connection, made out a very good case in favour of co-education; it is admitted that behaviour is better, and that, on the whole, there is less tendency toward a weakly sentimentalism regarding the opposite sex. The objection usually advanced that boys incline toward effeminacy remains at the stage of assertion; but the general question as to benefits must be answered both affirmatively and negatively, according to the period of growth. In the first place, the problem does not arise until the beginning of adolescence. It makes little difference whether elementary schools, provided they include no adolescents, are mixed or not; perhaps the presence of girls would tend to diminish that military cast of rule which many masters practise upon their scholars. With the inception of adolescence, however, the situation is a wholly different one. It is not so much the difficulty of having boys and girls together, as that of subjecting adolescents and pre-adolescents of both sexes to the same conditions. As the period begins with girls from one to two years earlier than in the case of boys, it is clear that girls become, almost at once, this amount older. With new interests and dispositions, for which previous methods are wholly unsuitable, it seems beneficial therefore to separate the sexes at the beginning of adolescence for the sake of the second of the two aspects mentioned, that of the material

and method of instruction. There is a period in mid-adolescence when boys and girls of the same age are again more nearly equal, when they can be advantageously brought together again, and at this time the association will be of benefit. It may be objected that this is just the time of juvenile love which every teacher thinks it his duty to discourage. It may be, however, that this is a mistaken view, that the best of educational measures may be precisely this biological diathesis, when the true teacher and inspirer of each sex is a member of the other and approximately of the same age. The purity and idealism of these affairs is well known, and they are viewed with apprehension only because adults project into them certain factors which adolescents have not yet discovered. At a somewhat later period the interests of the sexes, as already noted, are more divergent. At this time boys and girls, if not entirely separated, should have ample opportunity to escape from each other, and it is very doubtful if they can be brought together with any advantage for the remainder of the educational period.

A few more decades of social evolution will, perhaps, make clearer the scope of woman's activity through the emergence of factors which are now in the stage of experiment. At that time a new *Levana* may be written and adequate educational measures be devised. The one thing beyond doubt is that the woman of the future will have a far more important part to play than has been the case in the past. The most useful suggestion at present possible is that her education should be generic rather than specialised; of the heart as much as of the head; of appreciation as much as of knowledge. Whatever further developments may take place, they must be adjusted to the central fact of a woman's life, that of motherhood.

